



ENVIRONMENTAL **ASSESSMENT BOARD**

VOLUME:

188

DATE: Tuesday, April 3rd, 1990

BEFORE: A. KOVEN, Chairman

E. MARTEL, Member



FOR HEARING UPDATES CALL (TOLL-FREE): 1-800-387-8810



(416) 482-3277

2300 Yonge St., Suite 709, Toronto, Canada M4P 1E4





ENVIRONMENTAL ASSESSMENT **BOARD**

VOLUME:

188

DATE: Tuesday, April 3rd, 1990

BEFORE: A. KOVEN, Chairman

E. MARTEL, Member



FOR HEARING UPDATES CALL (TOLL-FREE): 1-800-387-8810



(416) 482-3277

2300 Yonge St., Suite 709, Toronto, Canada M4P 1E4



HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental Assessment for Timber Management on Crown Lands in Ontario;

- and -

IN THE MATTER OF a Notice by the Honourable Jim Bradley, Minister of the Environment, requiring the Environmental Assessment Board to hold a hearing with respect to a Class Environmental Assessment (No. NR-AA-30) of an undertaking by the Ministry of Natural Resources for the activity of timber management on Crown Lands in Ontario.

Hearing held at the Ramada Prince Arthur Hotel, 17 N. Cumberland Street, Thunder Bay, Ontario on Tuesday, April 3rd, 1990, commencing at 8:30 a.m.

VOLUME 188

BEFORE:

MRS. ANNE KOVEN MR. ELIE MARTEL

Chairman Member

APPEARANCES

MS.	V. FREIDIN, Q.C. C. BLASTORAH K. MURPHY Y. HERSCHER)	MINISTRY OF NATURAL RESOURCES
MR. MS. MS.	B. CAMPBELL J. SEABORN B. HARVIE)	MINISTRY OF ENVIRONMENT
MR. MR. MS. MR.	R. TUER, Q.C.) R. COSMAN) E. CRONK) P.R. CASSIDY)		ONTARIO FOREST INDUSTRIES ASSOCIATION and ONTARIO LUMBER MANUFACTURERS' ASSOCIATION
MR.	H. TURKSTRA		ENVIRONMENTAL ASSESSMENT BOARD
MR. DR.	E. HANNA) T. QUINNEY)		ONTARIO FEDERATION OF ANGLERS & HUNTERS
MR. MS.	D. HUNTER) N. KLEER)		NISHNAWBE-ASKI NATION and WINDIGO TRIBAL COUNCIL
MR.	R. LINDGREN)		FORESTS FOR TOMORROW
MR. MS. MR.	P. SANFORD) L. NICHOLLS) D. WOOD)		KIMBERLY-CLARK OF CANADA LIMITED and SPRUCE FALLS POWER & PAPER COMPANY
MR.	D. MacDONALD		ONTARIO FEDERATION OF LABOUR
MR.	R. COTTON		BOISE CASCADE OF CANADA
MR.			ONTARIO TRAPPERS ASSOCIATION
MR.	R. EDWARDS) B. McKERCHER)		NORTHERN ONTARIO TOURIST OUTFITTERS ASSOCIATION

Digitized by the Internet Archive in 2023 with funding from University of Toronto

APPEARANCES: (Cont'd)

MR. L. GREENSPOON) NORTHWATCH MS. B. LLOYD)

MR. J.W. ERICKSON, Q.C.) RED LAKE-EAR FALLS JOINT MR. B. BABCOCK MUNICIPAL COMMITTEE

MR. D. SCOTT) NORTHWESTERN ONTARIO
MR. J.S. TAYLOR) ASSOCIATED CHAMBERS
OF COMMERCE

MR. J.W. HARBELL) GREAT LAKES FOREST
MR. S.M. MAKUCH)

MR. J. EBBS ONTARIO PROFESSIONAL FORESTERS ASSOCIATION

MR. D. KING VENTURE TOURISM
ASSOCIATION OF ONTARIO

MR. D. COLBORNE) GRAND COUNCIL TREATY #3
MS. S.V. BAIR-MUIRHEAD)

MR. R. REILLY ONTARIO METIS &
ABORIGINAL ASSOCIATION

MR. H. GRAHAM

CANADIAN INSTITUTE OF FORESTRY (CENTRAL ONTARIO SECTION)

MR. G.J. KINLIN DEPARTMENT OF JUSTICE

MR. S.J. STEPINAC MINISTRY OF NORTHERN DEVELOPMENT & MINES

MR. M. COATES ONTARIO FORESTRY ASSOCIATION

MR. P. ODORIZZI BEARDMORE-LAKE NIPIGON WATCHDOG SOCIETY

APPEARANCES: (Cont'd)

MR. R.L. AXFORD CANADIAN ASSOCIATION OF

SINGLE INDUSTRY TOWNS

MR. M.O. EDWARDS FORT FRANCES CHAMBER OF

COMMERCE

MR. P.D. McCutcheon George NIXON

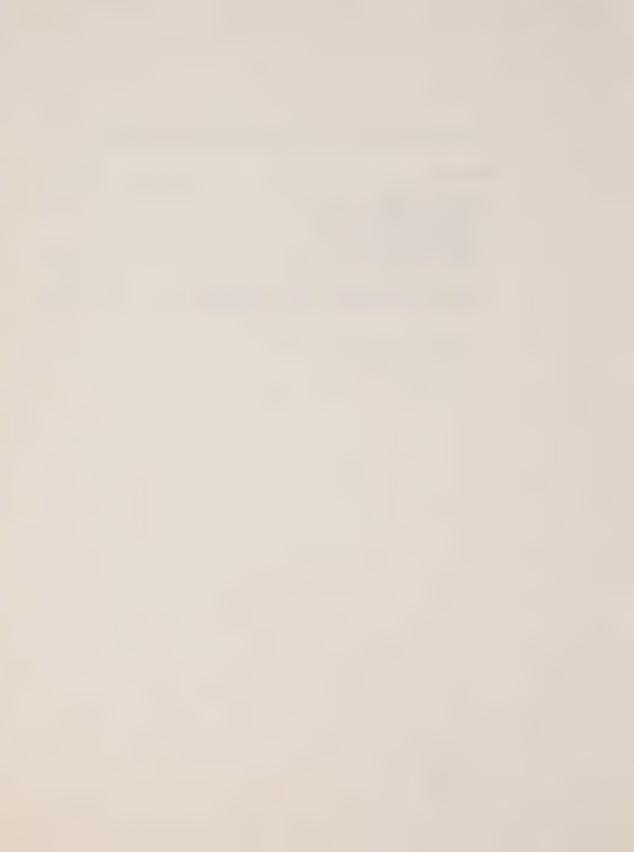
MR. C. BRUNETTA NORTHWESTERN ONTARIO

TOURISM ASSOCIATION



INDEX OF PROCEEDINGS

Witness:	Page No.
MURRAY ATKINSON, Sworn RONALD MAGEE, NICKOLAS SALTARELLI,	
DOUGLAS PRYKE, SANDRA IMADA, Affirmed	32901
Direct Examination by Mr. Cassidy Cross-Examination by Mr. Lindgren	32902 33036
Satellite Hearing	33168



INDEX OF EXHIBITS

Exhibit No.	Description	Page No.
1072	Statement of Evidence, OFIA/OLMA Panel 3.	32896
1073	Package of Interrogatory Nos: NAN No. 1, MNR No. 2, MOE No. 2, MNR No. 1, MOE No. 3, MOE No. 6, FFT No. 7, MOE No. 8, MNR No. 6, FFT No. 7 and MOE No. 9.	32897
1074	Errata letter dated February 14, 1990 to all full-time parties from P. Cassidy re: Panel No.3.	32898
1075	Letter dated March 12, 1990 to all full-time parties from P. Cassidy, re: Panel No. 3.	32898
1076A	Hard copy of overhead entitled: The OWOSFOP Forest.	32930
1076B	Hard copy of overhead entitled: Bullet Points, Basic Description of OWOSFOP.	32931
1076C	Hard copy of overhead entitled: The FORMAN Forest.	32933
1076D	Hard copy of overhead entitled: Bullet Points FORMAN/NORMAN Model, Brief Description.	32935
1076E	Hard copy of overhead entitled: The HSG Forest.	32937
1076F	Hard copy of overhead entitled: Bullet Points, Harvest Schedule Generator, a Brief Description.	32939
1076G	Hard copy of overhead entitled: Relative Size of Datasets.	32942



Index of Exhibits (Cont'd)

Exhibit No.	Description	Page No
1077	Bag containing pulp chips.	32957
1078	Bag containing sawdust and shavings.	32958
1079	Bag containing bark.	32959
1080	Sample of waferboard.	32977
1081	Sample of plywood.	32978
1082	Sample of particleboard.	32979
1083	Sample of strand board.	32979
1084	Sample of inch and a half waferboard.	32986
1085	Sample of two-inch waferboard.	32988
1086	Sample of strands.	32988
1087	Sample of fines.	32988
1088	Map of the area of the undertaking describing Grant Forest Products Woodsheds.	32991
1089	Hard copy of slide depicting various types of wood.	33003
1090	Hard copy of slide depicting papermaking fibers from hardwoods and softwoods.	33010
1091	Hard copy of slide depicting property differences between spruce and pine.	33016
1092	Hard copy of slide depicting indications of species difference for processing.	33017 s

e Associator Poporting Inc



Index of Exhibits (Cont'd)

Exhibit No.	Description	Page No.
1093	Replacement of Figure 1 on page 75 of Exhibit 1072.	33035
1094	FFT Interrogatory Question Nos. 1-9 (Panel 3).	33036



1	Upon commencing at 8:30 a.m.
2	MADAM CHAIR: Good morning. Please be
3	seated.
4	MR. CASSIDY: Good morning, Madam Chair.
5	MADAM CHAIR: Good morning, Mr. Cassidy.
6	MR. CASSIDY: Madam Chair, before we
7	commence this panel there are a number of exhibits
8	which the witnesses will be referring to and for
9	convenience sake it might be appropriate to file them
10	now, by the way, a collection of interrogatories.
11	There will be other exhibits filed during
12	the course of the evidence, but I thought for
13	convenience, rather than walk around eleven times to
14	file this collectionat one, I propose to do that now.
15	I also propose to file as an exhibit a
16	copy of the third OFIA/OLMA witness panel, the Wood
17	Supply Panel.
18	MADAM CHAIR: All right. Exhibit 1072 is
19	OFIA/OLMA Statement of Evidence, Panel 3, Wood Supply.
20	EXHIBIT NO. 1072: Statement of Evidence, OFIA/OLMA Panel 3.
21	raner 3.
22	MR. CASSIDY: If we could mark Exhibit
23	1073 as a collection of interrogatories, Madam Chair,
24	for OFIA/OLMA Panel 3 and I will just complete
25	circulating the copies I have to the parties and then I

1	can list off the interrogatories that are contained in
2	this collection.
3	MR. MARTEL: Mr. Cassidy, could I have an
4	extra copy?
5	MR. CASSIDY: (handed)
6	MR. MARTEL: Thank you.
7	MR. CASSIDY: Madam Chair, the
8	interrogatories contained in this collection now marked
9	Exhibit 1073 consists of Interrogatory No. 1 from NAN,
10	Nishnawbe-Aski Nation, No. 2 from MNR, No. 2 from MOE,
11	No. 1 from MNR, No. 3 from MOE, No. 6 from MOE No. 7
12	from Forests for Tomorrow, No. 8 from MOE, No. 6 from
13	MNR, No. 1 from Forests for Tomorrow and No. 9 from
14	MOE.
15	And I have read those in the order in
16	which they appear in this collection and, for the
17	benefit of the Board, there are page numbers attached
18	to the upper right-hand corner of each page of this
19	collection and during the course of the evidence we
20	will endeavor to point you to the appropriate page in
21	the course of the presentation of the evidence.
22	EXHIBIT NO. 1073: Package of Interrogatory Nos: NAN No. 1, MNR No. 2, MOE No. 2,
23	MNR No. 1, MOE No. 2, MOE No. 6, FFT No. 7, MOE No. 8, MNR No. 6,
24	FFT No. 1 and MOE No. 9.

MR. CASSIDY: The next materials that I

1	would like to file, Madam Chair, are two letters in
2	respect of the wood supply panel. The first is a
3	letter marked I am sorry, dated February 14th, 1990
4	from myself to all full-time parties as of the parties
5	list dated January 19th, 1990, and it is an errata
6	letter which makes some minor changes to some numerical
7	reference in the wood supply panel, specifically on
8	pages 82 and 86.
9	And if we could so mark that letter as
10	Exhibit 1074, Madam Chair.
11	EXHIBIT NO. 1074: Errata letter dated February 14, 1990 to all full-time parties
12	from P. Cassidy re: Panel No.3.
13	MR. CASSIDY: The second letter is a
14	letter dated March 12, 1990 from myself to all
15	full-time parties as of the parties list dated January
16	19th, 1990 and this letter attaches a copy of the graph
17	referred to at page 262 of the wood supply panel, Panel
18	No. 3.
19	And, Madam Chair, I ask that that be
20	marked as Exhibit 1075 and I will now circulate copies.
21	(handed)
22	EXHIBIT NO. 1075: Letter dated March 12, 1990 to all full-time parties from P.
23	Cassidy re: Panel No. 3.
24	MR. CASSIDY: Madam Chair, prior to
25	qualifying the witnesses and having them sworn in, I

would like to make a few opening remarks in respect of this panel, very briefly.

There will be essentially two parts to this panel or two segments of evidence, Madam Chair.

Mr. Saltarelli, who is seated in the middle of this panel, will give evidence in respect of Sections 1 through 6 of the witness statement dealing with what I might term wood supply issues at large, and the second part of the evidence consists of evidence from Mr.

Atkinson who is on your far left; Mr. Magee who is seated beside him, and on the far right, Mr. Pryke and Ms. Imada, who will describe wood supply fiber requirements of selected sectors of the forest products industry.

And those sectors are the sawmilling industry, and that will be discussed by Mr. Atkinson; the pulp and paper industry which will be discussed by both Mr. Pryke and Ms. Imada; and the waferboard industry which will be discussed by Mr. Magee.

Sawmilling and pulp and paper, as I am sure you are aware, Madam Chair, represent a sizeable portion of the total forest products industry and were chosen primarily for that reason, to illustrate the requirements of their sectors. The waferboard sector was chosen as an example from a large number of other

1	sectors which do not often come to general attention.
2	The Board will recall that it visited a waferboard mill
3	in Timmins, so you have the benefit of having seen
4	facilities from all three sectors we are dealing with
5	in this panel.
6	And with those remarks I propose to
7	qualify the witnesses in the following fashion.
8	Mr. Saltarelli as an expert in wood
9	supply analysis and planning, including regulation and
10	wood supply modeling; Mr. Pryke as an expert in
11	chemical pulp and bleaching technologies and the wood
12	supply requirements associated therewith; Ms. Imada as
13	an expert in wood and fiber properties and mechanical
14	pulping processes; Mr. Atkinson as an expert in wood
15	supply requirements associated with the manufacturing
16	and marketing of lumber and other sawn products; and
17	Mr. Magee as an expert in the procurement of wood
18	supply for waferboard manufacturing.
19	Prior to their being sworn, I ask that
20	they be qualified as such, Madam Chair.
21	MADAM CHAIR: Yes.
22	MR. CASSIDY: Thank you.
23	Madam Chair, I would ask now that the
24	witnesses be sworn or affirmed. And I can advise that
25	Mr. Atkinson will be sworn and the remainder of the

1	witnesses wish to be affirmed.
2	MADAM CHAIR: All right, thank you.
3	MR. CASSIDY: Mr. Atkinson, perhaps you
4	might like to go up front and place your hand on the
5	Bible. And, Madam Chair, it might be as convenient to
6	have the witnesses remain in their chairs as you affirm
7	them.
8	MADAM CHAIR: Yes, I think so.
9	MURRAY ATKINSON, Sworn
10	RONALD MAGEE, NICKOLAS SALTARELLI,
11	DOUGLAS PRYKE, SANDRA IMADA, Affirmed
12	MADAM CHAIR: Thank you.
13	Excuse me, Mr. Cassidy. Could we move
14	that overhead machine, Mr. Martel can't see Ms. Imada.
15	MR. CASSIDY: That's fine, we can bend it
16	down if that is acceptable to you, Mr. Martel.
17	In the course of the evidence the
18	witnesses propose to use the overheads rather
19	extensively. If you can just bear with me we will see
20	if we can get that bent down, actually we are going to
21	start with an overhead right away so it may be
22	appropriate to leave it up. Thank you, Madam Chair.
23	If I could just have a minute.
24	Madam Chair, I would like to direct the
25	Board's attention to page 28 of the witness statement

1	where we commence with Section 1 which, as I indicated
2	earlier, will be spoken to by Mr. Saltarelli.
3	And Mr. Virgo, who I believe you have
4	met, Madam Chair, is going to assist in putting up the
5	overheads over the course of the day, and Mr. Virgo has
6	placed an overhead which can be found on page 28 of the
7	witness statement which I believe is marked as Exhibit
8	1072.
9	DIRECT EXAMINATION BY MR. CASSIDY:
10	Q. And for the record, Mr. Saltarelli,
11	perhaps you could read the overhead into the
12	transcript.
13	MR. SALTARELLI: A. Thank you, Mr.
14	Cassidy. Madam Chair, it reads:
15	"It is the position of the Industry that
16	the integrated planning of timber
17	management activities within Forest
18	Management Agreement ("FMA") areas
19	and Company and Crown Management Units
20	("CMU") is a necessary and vital approach
21	to ensure a short and long-term wood
22	supply for the Industry."
23	Q. Thank you, Mr. Saltarelli. Could you
24	please summarize briefly what you mean by that
25	statement for the benefit of the Board?

A. When I was speaking to Mr. Cassidy,

Madam Chair and Mr. Martel, timber management starts

with the integration concept and what I mean by

integration concept is the integration of harvesting

and renewal activities. I can't stress strongly enough

how important it is.

Integration -- the concept of integration basically did not exist pre-FMA. At that time harvesting and renewal activities were treated as separate entities, Industry and the Ministry were more or less going about doing their own thing; Industry harvested and the Ministry renewed.

There was an explosion of harvesting technology that began in the late 1950s and more or less progressed unhindered until the early 1970s, and that will be dealt with in our harvesting panel; that is when the buck saw gave way to the chain saw and the chain saw gave way to rather large mechanized forward bunchers. One of the greatest advancements in harvesting technology was the advent of the wheeled skidder which had some very significant impacts on renewal efforts.

Regeneration expertise in contrast basically didn't converse, especially the mechanization of silviculture, it actually lagged far behind and by

1	the mid-1970s, early 1970s it was widely recognized
2	that there was a gulf developing between the two levels
3	of technology in silviculture and harvesting and
4	renewal.
5	In 1976 Ken Armson, whom the Board has
6	already heard, published his report and this I believe
7	for the first time gave official recognition to the
8	need to integrate harvesting and renewal to provide for
9	a future wood supply and that led directly to the
10	forest management agreements that we now have.
11	Q. And can you describe briefly the
12	developments or give examples of the developments since
13	the FMAs in this context?
14	A. Do you mean integrated developments?
15	Q. Yes.
16	A. Perhaps the most graphic example I
17	could cite, Madam Chair, was the development of the
18	high flotation wheeled skidder. It more or less
19	coincided with the beginning of the FMA in 1980 and it
20	was in response to the need to prevent the degradation
21	of sites caused by conventional skidding and
22	forwarding.
23	Q. And, Mr. Saltarelli, does the
24	industry support the concept of integration?
25	A. A hundred per cent.

O. And can you explain for the benefit

2	of the Board why it is industry views that as
3	important?
4	A. Yes. It's important to understand
5	what silviculture is all about. Many people equate
6	silviculture with planting of trees and that is just
7	not the way it is. Silviculture is the three major
8	parts; the first part is harvesting, the second part of
9	silviculture is renewal, and the third part is
10	maintenance.
11	The objective of integration of
12	harvesting and renewal is to harvest in such a manner
13	that the forest manager always has an eye towards the
14	establishment of the next crop and he will also
15	establish the next crop with an eye toward harvesting
16	it. So what happens is the array of activities come
17	full circle.
18	What it does is it provides for a
19	continuity of wood supply and it ensures the integrity
20	of the land base that is being managed and it assures
21	the future.
22	Q. And how does that relate to the
23	future of the industry?
24	A. Well obviously, Mr. Cassidy, it's

very important to the future of the industry that we

1	have	a i	future	wood	sup	ply	7 - 2	Are	you	referring	to	the
2	role	the	e indus	stry	has	to	play	y ir	17			

Q. Well, perhaps you can describe that for us then, if you can, the role of industry and, in specific, the company foresters in that?

A. It's our position that as far as forest management agreement areas and company management areas are concerned that the company forester involved is the best person to do the actual planning and implementation of these programs.

The reason for that is that he knows his land base the best, he knows what the sites are like, he knows what the soils are like, his trees and growth and so on. The Crown land he has obviously should be managed by the Crown because their foresters are best acquainted with their conditions, and that's okay with us.

would be produced by the Crown in those situations, however, does come to the industry in one form or another. So it's been the industry's position that we should become involved in the planning process on Crown management units, and I will refer the Board to our Panel 10 evidence which is planning which will be presented in due course, and I would like to refer you

Τ	to our term and condition which has to do with the
2	Integrated Resource User Committee which would apply to
3	all timber management plans. I am not sure what number
4	that is, Mr. Cassidy.
5	MR. CASSIDY: I can provide that number
6	for you after the break, Madam Chair.
7	Thank you, Mr. Saltarelli.
8	If we could move then to Section 2 of the
9	evidence, Madam Chair, and that can be found commencing
10	at page 30 and I have asked Mr. Spergo to put up an
11	overhead for the benefit of the Board which can also be
12	found on page 30 in bold print.
13	MR. SALTARELLI: It reads, Madam Chair:
14	"It is the Industry's position that given
15	the variability and fluctuation of both
16	short and long-term operational
17	circumstances of the mill requirements,
18	it is critical that Industry timber
19	managers have a broad range of cost
20	effective wood supply management planning
21	and operations alternatives available to
22	use within a framework of sound overall
23	timber management planning."
24	MR. CASSIDY: Q. And, Mr. Saltarelli, on
25	page 30 you refer to operating circumstances causing

1	the manager to change the plans and projections for
2	supplying timber to mills. I understand you wish to
3	discuss this further and you wish to refer to an
4	interrogatory filed by Nishnawbe-Aski Nation, No. 1?
5	MR. SALTARELLI: A. Yes, Madam Chair,
6	that is numbered No. 1 as Mr. Cassidy said.
7	MR. CASSIDY: And that, Madam Chair, can
8 .	be found on page 1 of Exhibit 1073.
9	MR. SALTARELLI: And essentially
10	Nishnawbe-Aski Nation and Windigo Tribal Council
11	requested some clarification on what we meant by
12	weather fluctuations, equipment availability and
13	personnel-related reasons. And to answer that question
14	I cited three particular circumstances which were
15	particular to the Iroquois Falls Forest with which I am
16	most familiar.
17	With respect to weather fluctuations I
18	spoke to the wind storm that blew up in late November,
19	1987 and this related in a scattered area of blowdown
20	throughout the Iroquois Falls Forest and much of which
21	of course was well beyond our harvesting operations in
22	the location of our operations and that required
23	amendment to the timber management plan.
24	Equipment availability, this is something
25	that hasn't happened yet, but it just illustrates the

1	possibility of something happening. I refer to the
2	timber management plan. At the time this interrogatory
3	was answered, the plan had been submitted to the MNR
4	for approval, it has since been approved by MNR. It is
5	based the harvesting aspect of that plan, the access
6	aspect, is based upon the acquisition of two Lokomo
7	clambunk forwarders in addition to the three we already
8	have.
9	And I understand that the Board has seen
10	a clambunk forwarder in Kapuskasing, so I won't get
11	into describing what the machine is like. We now have
12	three. We do intend to acquire two, but economic
13	circumstances are rapidly changing and there is a
14	possibility, although we firmly have plans to acquire
15	these machines because they cost almost half a million
16	dollars apiece
17	Q. When you are referring to we, you are
18	referring to Abitibi-Price?
19	A. I am referring to Abitibi-Price, Mr.
20	Cassidy.
21	Q. Excuse me.
22	A. Because of economic circumstances we

24

25

Farr & Associates Reporting, Inc.

Clambunk forwarding allows long distances

may not be in a position to acquire those two machines.

between gravel roads and between harvest blocks and if

1	a portion of our operation must be forwarded using
2	conventional high flotation skidders, we may find
3	ourselves in a position to plan for more road
4	construction in the TMP which of course would be part
5	of the amendment.
6	The third example
7	MADAM CHAIR: Excuse me, Mr. Saltarelli.
8	MR. SALTARELLI: Sorry, Madam Chair.
9	MADAM CHAIR: If you require more road
10	then in fact that harvest allocation would be harvested
11	in a subsequent five-year period?
12	MR. SALTARELLI: No, harvest allocation
13	would remain the same. I should explain that further.
14	With clambunk forwarding one requires fewer roads, so
15	the roads can go farther distances apart within the
16	same cutting block, but if one is using more
17	conventional means of forwarding, the roads have to be
18	closer together, which means you need more roads.
19	The cutting block itself doesn't change
20	but the roads will change and when a road is changed in
21	a TMP it requires an amendment to the TMP.
22	MADAM CHAIR: Wouldn't that add a
23	considerable period of time before you could start
24	harvesting?
25	MR. SALTARELLI: That is the point we are

attempting to make, if we have to amend the TMP it can cause some delay.

The third point, Madam Chair, has to do with the personnel-related reference. I cited the labour dispute that occurred in Iroquois Falls in the first part of February, 1988. We were right in the middle of our winter site preparation program. Because the Iroquois Falls Forest is in the Clay Belt we have to prepare our sites and our plans in the wintertime when the ground is frozen solid because the ground is otherwise very wet and very soft and mechanically not very strong.

What that labour dispute did, in effect, was shut down our program that was half done and we had five and a half million trees coming on stream starting in May of that same year, so you had to get the sites prepared at the time for the arrival of that planting stock. That required us to amend our plans to deal with the site preparation of the third party area, which is just an example.

MR. CASSIDY: Q. And I understand, Mr. Saltarelli, that at page 31 of the witness statement, Mr. Saltarelli, you refer in the middle paragraph to:

"Technological developments in a mill may change the wood supply requirements from

a unit or units."

And I understand you wish to speak to

that matter and in particular refer to an interrogatory

filed by the Ministry of Natural Resources, that is

interrogatory No. 2 which can be found on page 3 of

Exhibit 1073, Madam Chair.

MR. SALTARELLI: A. Thank you, Mr.

Cassidy. The question posed in essence was: Is it

common for technological developments within a mill

environment to occur so rapidly that plan amendements

can be effected in a timely manner and, again, I fell

upon my expertise at Iroquois Falls to answer the

question and I cited four innovations that are actually

still on the books.

Again, at the time our TMP was in draft form or had been submitted for approval to the MNR and has since been approved and did not incorporate or consider these four innovations because they had been actually brand new at the time. Two of those innovations related to the ability to use aspen; one as newsprint furnish which would be a first for Iroquois Falls and Iroquois Falls has been in operation since 1913.

The second related to the use of aspen chips as boiler fuel. We had a small test operation of

150 tonnes of aspen chips a little while ago, the boiler fuel worked out quite well.

that our engineers had to reduce the age of the fiber and this is in response to more or less a market demand for bright newsprint. If we had to reduce the age of fiber, it means that we have to shorten the time between the point that we harvest the tree, the point that we deliver it to the mill and because of our systems, because our ground is so wet, we produce our freshest wood at gravel roads. It means we can access any time of the year, summertime, springtime, et cetera for our newsprint.

So if the engineers all of a sudden say we need fresher wood and we decide to go that route, our management objectives say we can do that. It may require that we build more gravel roads. This, of course, relates back to the clambunk forwarder illustration given before.

The fourth innovation relates to the potential use of recycled fiber. Of course, everyone is looking into that. We are not quite sure how that will affect our operations at Iroquois Falls and we know there would be an impact and that could somehow impact on management of the Iroquois Falls forest, as

well as how we get fiber, where we get fiber, so our sawmills are concerned.

For a variety of reasons, in addition to those examples just cited, we may not be in the position to plan for advances in technology at the mill level, perhaps because funds have not been committed, because of the potential impact that could have on the community in which we operate, it could even impact on our stock price, the price of the stock of the company.

Even if technologies do not change, and that's a very big assumption, market demands will almost absolutely change with a great deal of certainty and this will change wood supply requirements, and I believe that Mr. Atkinson has an example he would like to share with you.

Q. Yes, Mr. Atkinson, I understand that in your evidence you wish to -- I will try again. I understand that you wish to refer to an example of what Mr. Saltarelli has been talking about in terms of market demand changes?

MR. ATKINSON: A. Yes, Mr. Cassidy,

Madam Chair. The example applies to railway ties.

It's a product that we would call an extra return

product in the sawmill business and the demand for them

fluctuates quite widely; for instance, in 1983 the

production of railway ties in Ontario totalled 23,000 1 cubic metres and two years later in 1985 it totalled 2 86,000 cubic metres. The 86,000 is roughly 850,000 3 4 railway ties. 5 To be ready for that, we had to have some flexibility in our logging plans to produce the kind of 6 timber that will go into railway ties. 7 8 Q. Mr. Atkinson, could you provide the 9 Board with the page reference where they might find that discussion in your witness statement? 10 A. Yes, Madam Chair, that's on page 48 11 12 of my written presentation. 13 Q. And I understand you wish to refer to 14 another example of market changes? 15 A. Another market change, Madam Chair, 16 was in early 1989 at Great West Timber in Thunder Bay 17 here, which is a plant that I am responsible for, we 18 found it necessary to reduce production because of 19 market conditions; low prices, low demand, and for that reason the plant was shut down for the first two months 20 21 of 1989. 22 And in terms of log supply, that meant 23 that in that year our actual consumption of logs was 24 reduced by about 120,000 cubic metres which changed our

logging plans significantly because of market

1	conditions.
2	Q. Thank you, Mr. Atkinson.
3	Mr. Saltarelli, I would like to move back
4	to you and come back just briefly to the matter of
5	operating circumstances that you discussed earlier and
6	you provided examples in response to an interrogatory.
7	Are there other circumstances relating to
8	operations that relate to wood supply?
9	MR. SALTARELLI: A. Yes, Mr. Cassidy,
10	and to answer that question I would refer the Board to
11	Ministry of Environment interrogatory No. 2,
12	specifically 2(b) is what I am addressing here.
13	The question posed was in relation to the
14	three examples which I discussed earlier: Are there
15	other what kind of turnaround time of approval is
16	required to change operations.
17	MR. CASSIDY: And that can be found at
18	page 5 of Exhibit 1037, Madam Chair.
19	Q. Can you discuss then the
20	accommodations that or should there be
21	accommodations in the planning process for the
22	fluctuations that you have described?
23	MR. SALTARELLI: A. Yes, absolutely.
24	Q. Can you describe those?
25	A. I explained that there are different

types of circumstances. There are those that are percipitated suddenly by the weather, for example, or spring break-up, that would require a fairly rapid response time, weeks or even days.

Timing amendments brought about by changes in mill technology are usually far less critical and typically have as much as years of time to effect changes to our planning process, changes of market demand, on the other hand, can be very rapid. We could acquire an order for some sort of product and that order can be cancelled and that could affect our inventories of roundwood or chips or so on. This is particularly a concern to the sawmill industry when they get on order for specialty products.

As far as how it relates to the planning process, again I am referring to Panel 10. We believe that, again, the plan author, in this case the Ministry, should host the open house, again because they are most familiar with the circumstances and how they might change.

We have a term and condition as well as what we present in our Panel 10 evidence that proposes to establish local Advisory Committees and those committees, because they again are local, are familiar with circumstances more than others who would be in a

position to effect changes or amendments most
expeditiously. Our Panel 10 evidence will cover the
need for carry-over as between one plan period and
another, the need for flexibility and contingency areas
to relate to particular circumstances and especially
the need for public input, and I refer specifically to
the Integrated Resource Users Committee.

Q. All right. Mr. Saltarelli, the Board in the scoping session for this panel asked a question in that regard with respect to the -- on page 33 of your witness statement, in respect of informing the public about the timber management plan, we have the change of markets or other influences shifted through the planning period, and the Board asked about the Industry's role in doing that.

Does the evidence you have given address that? Would you care to add anything else?

A. Yes. Essentially I would emphasize that it is our position that the plan author should become more involved with the public participation process. So the answer to the question is essentially yes, we do see ourselves becoming much more proactive in the public input phase.

Q. Thank you. Do you wish to summarize your evidence in respect to this section just briefly?

1	A. Certainly, Mr. Cassidy. We would ask
2	that the Board bear in mind markets are constantly
3	changing, as well as market technologies are constantly
4	changing and the resource is changing at the same time.
5	The planning system that will eventually be put into
6	place should be designed to recognize this timeliness
7	of all these factors with respect to the planning
8	process.
9	What is key is timeliness. We have to be
10	able to respond as quickly as a situation demands in
11	order to remain competitive. This is a very
12	competitive industry. Bear in mind that most of our
13	products are sold internationally.
14	Thank you, Mr. Cassidy.
15	MR. CASSIDY: If we could move on then,
16	Madam Chair, Mr. Martel, to Section 3 of the evidence
17	which for the benefit of the Board commences at page
18	36. And if I could ask Mr. Virgo to assist and put up
19	the next overhead which can also be found on page 36,
20	Madam Chair.
21	Q. Mr. Saltarelli, would you please read
22	that into the record?
23	MR. SALTARELLI: A. Yes, it reads, Madam
24	Chair:
25	"It is the Industry's position that the

forest resources inventory is a
valuable timber management planning tool.
In appropriate circumstances, Industry
timber managers will obtain and use
supplemental timber resource data when
planning and conducting timber management
activities."

Q. And, Mr. Saltarelli, can you summarize what you mean in this section?

A. Essentially, Mr. Cassidy, in spite of its limitations, I cannot conceive planning without having the forest resources inventory. I think it would be virtually impossible.

The FRI, even as it is constituted, is an extremely valuable tool for macro-level planning - by macro-level planning I mean strategic planning - but it also provides the basis and sort of the fundamental starting point for stand level planning or planning and this is because it compartmentalizes the forest; it divides the forest into nice neat little polygons.

It's easy using the FRI to identify
discreet areas and compartmentalize them and we can
through the acquistion of supplemental data determine
specific specialty attributes for each of those
compartments within the FRIs, so it actually organizes

1	the forest for us.
2	Q. I understand you wish to explain the
3	supplemental data that you refer to?
4	A. Yes. I would like to file the
5	Ministry of Environment's interrogatory No. 3.
6	MR. CASSIDY: That can be found on page
7	of Exhibit 1073, Madam Chair, Mr. Martel.
8	MR. SATARELLI: And the question was
9	posed in the context of refining FRI to give timber
.0	managers the ability to effect better management
.1	decisions, and this is really what we refer to as a
12	decision support system or part of a decision support
. 3	system in the industry.
4	Some of the information that could be
.5	collected would be in the form of so-called OPC data,
.6	operational cruise, and this was discussed at length by
.7	Dr. Osborn I believe in Panel 3 or 4.
. 8	On the ground we may want to look at
9	average tree run, for example. This is especially
20	important for the sawmilling industry. Tree run means
21	a number of trees per cubic metre. It's also important
22	to the pulping industry as well, but not quite so
13	critical.
24	You might want to look at average trees

form class, that really means how straight the tree is,

1	how crooked it is, how many knots it has and so on, and
2	that's important to the veneer industry as well as
3	sawmilling.
4	We may wish to collect soils and forest
5	ecosystem qualification data and this of course is in
6	relation to our silvicultural programs.
7	There are a number of other bits of
8	information or categories of information that may not
9	be identified and they really all fall into the place
.0	of growth in the yield and these things will be very
1	helpful in some circumstances to help us effect
.2	management decisions.
.3	I would hasten to point out that some of
4	this information may or may not be required, it depends
.5	to a great measure on how good the FRI is, how current
.6	it is, what kind of planning constraints we have or
.7	planning objectives and strategies, what kind of
. 8	products we are producing and so on.
.9	MADAM CHAIR: Is this information, Mr.
0	Saltarelli, this list, what you consider to be a fairly
1	complete supplement to the FRI?
22	MR. SALTARELLI: No, Madam Chair, I just
3	gave some specific examples in this case.
24	MADAM CHAIR: So, in your opinion, there
25	is really no one list that could be used to supplement

1	the FRI, that it would change with management units?
2	MR. SALTARELLI: Not one list that comes
3	to mind. I think each management unit would have a
4	particular set of circumstances. They change so much,
5	we have so many different forest regions in Ontario
6	from the Clay Belt to the Superior Rockwood/Superior
7	around here, we have sand flats south of Englehart and
8	so on. Each management unit would have a different set
9	of information required to make better decisions.
10	MADAM CHAIR: Each forester working in
11	those management units would have in his or her mind a
12	similar sort of list that they
13	MR. SALTARELLI: Absolutely.
14	MR. CASSIDY: Q. Mr. Saltarelli, can you
15	describe for the benefit of the Board how that
16	information or these types of information might be
17	acquired or the ways that it's done?
18	MR. SALTARELLI: A. Yes, that's referred
19	to as data capture. It is more or less
20	self-explanatory, Madam Chair, Mr. Martel. It tells
21	how we go about capturing data. Again, I refer to the
22	operational cruise which is sort of a direct
23	on-the-ground type of data collection.
24	There are also other means; remote
25	imagery is primarily the most important, and I'm

referring to aerial photography which is not a new technology, it has been around since about the 1930s but it is still used. It is being used more effectively now with different types of films such as colour, infrared and so on.

Satellite imagery is something that has been looked at by the Industry and by the forest community at large. They are actually for a couple of decades now starting to develop some exciting possibilities; radar and scanning is something that has some good possibilities. It was developed by the military and it has now found itself in the public domain.

There is a fair bit of work done at the Ontario Centre for Remote Sensing which is a branch of the MNR in radar and a brand new technology is scanning and this is when a video camera of sorts is attached to an airplane and flies over the forest and then collects these huge amounts of data, and this has some really exciting applications as far as integrating that technology with the geographic information system technology.

Some information is collected just by virtue of local knowledge. Again, the forest manager's expertise, his soils and sites, how his trees grow. He

can look at an FRI description and know by that description what that stand looks like without going into the field and looking at it.

That manager have may access to cull surveys, to tree runs and recovered volumes, he knows how much volume he got from road No. 56 and block No. B, he knows what the FRI said was going to be there. He can establish different relationships between what the FRI says is there and what was actually there on the ground and, therefore, apply a kind of factor to FRIs to give it a little better accuracy.

Now, I got into geographic information systems and I was very briefly speaking to scannings. The primary value of the GIS is that a lot of those are really for the first time in history. This is the first time that technology has allowed it to happen. It allows the storage and retrieval of incredible massive resource data sets, resource information. It produces resource pictures in time at a snapshot approach to a depiction of the inventory.

We all heard that a picture is worth a thousand words, and that's exactly what it does; it allows timber managers to take a picture of their inventory and look at it and it allows that manager to make a very rapid assessment just by looking at spacial

distribution of all those stands and where they are in
relation to roads and lakes and things, and it gives
them a very good appreciation for his inventory
situation

- Q. In respect of GIS, Mr. Saltarelli, on page 38 of your witness statement you refer to term and condition No. 48 from MNR, and can you advise the Board of the Industry's view with respect of that term and condition and industry's involvement?
- A. Essentially we are a hundred per cent supportive of MNR's initiative. Industry is actively involved in developing GIS applications for use in timber management and we would very much like to assist MNR and go on record to say we are looking forward to assisting MNR in the completion of their term and condition No. 48.

I believe the Board -- this is a matter of clarification. The Board has seen GIS mass produced by CP Forest Products. I believe they are Exhibits 1025 and 1026.

MR. CASSIDY: I believe that is the case,
Madam Chair. We are going to review those exhibits to
confirm that, which I can do over the course of the
break, but my understanding from the foggy memory of
January 29th is that those were GIS maps produced by

1	Canadian Pacific Forest Products and we will confirm
2	that over the break.
3	Just while I am on matters relating to
4	that, Madam Chair, in terms of OFIA/OLMA terms and
5	conditions on Advisory Committees that Mr. Saltarelli
6	referred to earlier, I can advise the Board that those
7	are discussed in the preamble of the terms and
8	conditions, but are also referred to in Section 1 of
9	the OFIA/OLMA terms and conditions.
10	Thank you, Mr. Saltarelli.
11	If I can move on then to Section 4 of the
12	witness statement which can be found on pages 39
13	through 41. And Mr. Virgo is going to put up an
14	overhead which reflects the full statement which should
15	be on page 39, which is in fact contained in the
16	executive summary as paragraph No. 6.
17	However, the word processor chopped off
18	the last four words on paragraph five words on
19	paragraph 39.
20	Q. So perhaps for the sake of
21	completeness, you could read in the full statement for
22	the record, Mr. Saltarelli?
23	MR. SALTARELLI: A. Thank you, Mr.
24	Cassidy. The angle here is rather oblique, I will see
25	what I can do. The overhead reads:

1	"It is the position of Industry that the
2	continuing development of a greater
3	degree of sophistication in the methods
4	of a timber resource regulation and
5	allocation should be supported and
6	encouraged."
7	Q. And I understand you first wish to
8	refer to a statement of issues filed by the Ministry of
9	Natural Resources in reference to their statement of
0	issues paragraph 2(b) on the use of OWOSFOP and other
1	models, and could you please discuss that?
2	A. Yes, Mr. Cassidy. It is our
3	interpretation, looking at the timber management
4	planning manual, that OWOSFOP is the only officially
5	recognized model for regulation use in managing FMAs.

I would point out, however, that the Ministry does allow more or less unrestricted use of other regulation models if it's possible to justify their use as long as their outputs can be compared with the outputs of OWOSFOP.

The northern region of the Ministry, as a matter of fact, is actively encouraging the use of an alternate volume supply model, as well as OWOSFOP in good timber management plans.

Q. Mr. Saltarelli, on page 40 your

evidence refers to Ministry's position on the evolution 1 2 of models and the statement refers to good development. 3 I understand you wish to provide the 4 Board with some overheads which were drawn to discuss the evolution that you refer to in your witness 5 6 statement of various models? A. Yes, Mr. Cassidy. Essentially there 7 8 are two facets to the thing I am going to try to 9 exemplify here, and that is the nature of the data set 10 that each model uses, and I am discussing three 11 distinctive different models here, as well as how those 12 models see the forest that they are modelling and you 13 can see it's a very kind of nebulous term because they 14 don't have any sort of intelligence or -- I think I 15 will turn this mike off. 16 MR. CASSIDY: Madam Chair, I have copies 17 of the drawings that Mr. Saltarelli is going to refer 18 to in respect of these evolutionary models which I will 19 provide to the Board. 20 MADAM CHAIR: This will be Exhibit 1076. 21 MR. CASSIDY: Madam Chair, what I suggest 22 we do, since Mr. Saltarelli will be referring to each, 23 for the purposes of the record, as he finishes each 24 overhead I will simply suggest that that be marked

Exhibit 1076A, B, et cetera.

1	EXHIBIT NO. 1076A: Hard copy of overhead entitled:
2	The OWOSFOP Forest.
3	MR. CASSIDY: Q. And therefore, you are
4	showing an overhead which we could mark as Exhibit
5	1076A titled: The OWOSFOP Forest.
6	MR. SALTARELLI: A. Yes, Mr. Cassidy,
7	this is a depiction of the OWOSFOP Forest.
8	The OWOSFOP program sees, as it were, the
9	forest of Iroquois Falls, this would be FMA 500-200.
0	It's a map, that's Lake Abitibi there after which
1	Abitibi-Price is named.
2	The OWOSFOP model sees the forest as a
.3	lump and the circle here is not by accident, it doesn't
4	lend any sort of spacial considerations to the data.
.5	It takes the forest and breaks it up into a number of
.6	forest units, it can be five, six, eight or nine,
.7	whatever the case may be, but a limited number,
8	generally small, generally one digit.
.9	It takes each forest unit and essentially
0	breaks it up into age classes within the forest, but
1	this is fundamentally the basis upon there is no
2	spacial relationship and that is called aggregation,
13	it's an aggregation model.
4	MR. CASSIDY: Before we go on any
5	further, if I could ask the Board if they can see that

1	overhead or do they wish the lights to be turned out.
2	MADAM CHAIR: I think we are looking at
3	our hard copy.
4	MR. CASSIDY: Q. We are putting up
5	another overhead. What do you propose to entitle that
6	overhead, Mr. Saltarelli?
7	MR. SALTARELLI: A. The previous one or
8	this one?
9	Q. This one.
.0	A. This one will be Bullet Points, Basic
.1	Description of OWOSFOP.
.2	MR. CASSIDY: And that will be Exhibit
.3	1076B, which is your collection, Madam Chair?
. 4	EXHIBIT NO. 1076B: Hard copy of overhead entitled: Bullet Points, basic Description
.5	of OWOSFOP.
.6	MR. SALTARELLI: OWOSFOP is essentially
.7	an area regulation simulation. It's also called an
. 8	inventory projection model; in other words, it projects
.9	inventories through time. It's a bookkeeping tool, by
20	that I mean that it really just keeps track of numbers,
1	it doesn't keep track of discreet stands or what have
22	you. It's incapable of spacial considerations, it
13	doesn't know where those stands are. It's just a lump
2.4	again.

OWÓSFOP has fairly limited forest unit

capabilities; once a forest unit has been harvested in

OWOSFOP it generally goes back into that same forest

unit it can't change. To quote, "a rose is a rose is

always a rose".

OWOSFOP is fairly arbitrary in its simulation of depletions and accruals. It assumes because those data are aggregated that all stands are created equally and all stands are equally accessible to access, which in reality is never the case.

By itself it's a poor indicator of sustainable wood supply; in other words, you can't just run OOWOSFOP and say that's our wood supply, you have to take the output, you have to go back to ledgers, go back to maps and laborousily disaggregate all of those aggregations. And that is the only way that you can get a fairly good approximation of wood supply.

The dataset is easy to prepare, it's taken from the three-year report for the forest resources inventory. The output is only moderaely sensitive to user assumptions and that is because it has a very limited sort of algorithm attached to it and that is because the dataset is aggregated in rather gross lumps.

The output is fairly simple to interpret, however the regulation and allocation areas are poorly

1	related. This again is a reflection of how the model
2	regulates without any consideration for where those
3	stands are and really doesn't take any cognizance of
4	constraints of road systems, of where the lakes are and
5	so on, other users and so on. And it has limited
6	potential for enhancements; in other words, OWOSFOP
7	will probably always be a fairly basic wood supply
8	model.
9	MR. CASSIDY: Q. Moving on to the next
10	overhead which is titled: The FORMAN Forest which,
11	Madam Chair, if we could mark as Exhibit 1076C?
12	EXHIBIT NO. 1076C: Hard copy of overhead entitled: The FORMAN Forest.
13	The FORMAN FOREST.
14	MR. SALTARELLI: Yes. There are some
15	similarities here. FORMAN is like OWOSFOP production
16	of New Brunswick.
17	MR. CASSIDY: Q. What does FORMAN stand
18	for?
19	MR. SALTARELLI: A. It stands for forest
20	management. There is a version of FORMAN just produced

Farr & Associates Reporting, Inc.

again in the northern region which is called NORMAN and

it stands for northern region forest management as it's

northern region management. It integrates some of the

planning considerations in Ontario that New Brunswick

doesn't have like free to grow, NSR and so on.

1	FORMAN and NORMAN essentially does the
2	same thing with the forest resource; in other words, it
3	aggregates it into lumps. The difference here is that
4	there are a larger number of the aggregations, it's
5	really
6	Q. I am sorry, you referred to NORMAN
7	and what does that stand for?
8	A. It stands for northern region
9	management of forest project.
10	Q. Right.
11	A. Again what I am saying, that where
12	OWOSFOP will subdivide the forest into essentially
13	seven or eight or what have you forest units, NORMAN
14	would subdivide the same forest area into perhaps a 150
15	or 200 forest classes and each one of those classes has
16	very distinct characteristics. They are all the same
17	age, they have about the same species compositions,
18	stocking perhaps. It's really up to the manager.
19	So the big advantage as far as how FORMAN
20	sees the forest I think compartmentalizes it a little
21	bit better, but it's still aggregated.
22	Q. Moving on to the next overhead which
23	will be Exhibit 1076D, and that could be described as
24	what, Mr. Saltarelli?
25	A. This will be Bullet Points

1	FORMAN/NORMAN	Model,	Brief	Description.

2 --- EXHIBIT NO. 1076D: Hard copy of overhead entitled:
Bullet Points FORMAN/NORMAN
Model, Brief Description.

MR. SALTARELLI: FORMAN is, unlike

OWOSFOP, a volume regulation model; OWOSFOP as you

remember is an area regulation model. It too is tied

to aggregated forest classes as is OWOSFOP. Again, the

aggregations are split up a bit more.

It too is a sequential inventory projected simulator and a bookkeeping tool. It keeps track of numbers, it's not really capable of looking at spacial considerations such as roads and stands and so on.

It has good forest class development capabilities and that is because each of those forest classes, 150 or 200 or what have you, has a set of developmental curves attached to them. So a forest class can be harvested in a certain manner and treated in a certain manner and may become a different type of forest altogether and that is something that FORMAN does that OWOSFOP cannot do.

There is a less arbitrary simulation of depletions and accruals inherent with FORMAN. Because the land base is better defined in the dataset it's capable of differentiating products; in other words,

you can run the program to maximize sawlogs, for example, and that again is something you can't get out of OWOSFOP. Is capable of considering costs, it may be a harvest strategy to minimize costs for a period of time, and that is something that can be done.

It is a potentially fair indicator of sustainable wood supply, but again there is a need to take the information provided by FORMAN and disaggregate it and apply it to the operating level, the algorithm maps, the ledgers, attempt to take those numbers that FORMAN gives and apply that to the real situation.

The dataset is somewhat difficult to prepare insofar as one has to define what those forest classes are and, again, the more forest classes you have the more accurate the model is going to be and, of course, the more complex it is going to be.

The output is more sensitive to user assumptions than is OWOSFOP, mainly because it does more. The model relies upon a sort of expert system to tells it what happens when a certain treatment or a certain activity happens to a certain forest class.

There can be considerable interpretation of output.

There are a couple of recent TMPs that have used FORMAN as a regulation system. I understand

1	that each of them used upwards of a couple of hundred
2	simulations in order to come up with one that they felt
3	was best for their unit. That takes an awful lot of
4	time. Because of that practice of running all those
5	simulations to better reflect the real situation, there
6	is a better relationship between regulation and
7	allocation and there is some potential for
8	advancement enhancements in that program, and I have
9	cited the WILD Program which is used in the northern
10	region to look at or model wildlife habitat as an
11	example.
12	MR. CASSIDY: And the next overhead,
13	Madam Chair, would be Exhibit 1076E, titled: The HSG
14	Forest.
15	EXHIBIT NO. 1076E: Hard copy of overhead entitled: The HSG Forest.
16	The mbd Tolege.
17	MR. CASSIDY: Q. And can you explain to
18	the Board what HSG is, Mr. Saltarelli?
19	MR. SALTARELLI A. HSG is an acronym for
20	Harvest Schedule Generator. It's a brand new model,
21	it's state-of-the-art and was produced by the Petawawa
22	National Forestry Institute in consultation with
23	Northern Region of the Ministry of Natural Resources
24	and Abitibi-Price at Iroquois Falls. Tom Moore is the
25	real brain child this is the brain child of Tom

1	Moore, he did most of the work.
2	Q. And he's at the?
3	A. He's at Petawawa, yes.
4	The depiction here what I have done is
5	I have taken a subsection of this subpeninsula, this
6	peninsula here in Lake Abitibi and blown it up, and
7	then taken a subpeninsula and blown that up to give you
8	an idea of what HSG sees. And this is where there is
9	giant leap forward in modeling.
10	HSG sees all these different base maps
11	here, it sees the roads, it knows where this creek is,
12	it knows where that swamp is, where these alder swells
13	are, it knows where that osprey nest is, it knows the
14	relative position of this park and the stands, it knows
15	each stand's identity, what kind of volumes it has.
16	MR. CASSIDY: I think, Madam Chair, the
17	record will be self-explanatory and doesn't need the
18	witness to describe where it is in the actual overhead
19	MR. SALTARELLI: All right. It has an
20	idea of each individual stand description, how old it
21	is, how tall it is, what kind of site it's growing on
22	and, for the first time, we have given a spacial
23	dimension to regulation in a wood supply model. That
24	is the important thing about HSG.
25	MR. CASSIDY: And the next overhead is

1	Exhibit 1076F. And what would be the title of that,
2	Mr. Saltarelli?
3	MR. SALTARELLI: A. This would be Bullet
4	Points, Harvest Schedule Generator, a Brief
5	Description.
6	EXHIBIT NO. 1076F: Hard copy of overhead entitled: Bullet Points, Harvest Schedule
7	Generator, a Brief Description.
8	MR. SALTARELLI: HSG is characterized as
9	a super FORMAN. This is important because it
10	demonstrates a kind of evolution in modeling. FORMAN
11	itself wouldn't have happened without OWOSFOP, OWOSFOP
12	was a step in the process and it's possible that HSG
13	wouldn't have happened without FORMAN.
14	It's a volume regulation model, unlike
15	FORMAN, but it's based on GIS technology and because it
16	knows where all those different polygons are it's
17	highly spacial and temporal; in other words, it has the
18	ability to track discreet areas through time. I
19	believe the Iroquois Falls Forest has something in the
20	order of 40,000 polygons that it's capable of
21	considering and tracking through time.
22	It is capable of exceedingly complex
23	stand development capabilities and this is based upon
24	an expert system and information provided by experts
25	put into assorted matrix the model accesses to match

up -- mix and match different situations, come up with
a different end product.

There is a much more precise simulation of depletions and accruals, again because on a stand level basis it goes to the actual stands and it models the regulation on that basis. It's capable of differentiating products and values, as is FORMAN to some extent. It is capable of considering cost. That particular aspect is pretty basic knowledge being developed to a higher extent by I believe the CFS in Newfoundland.

It is a potentially good indicator of sustainable wood supply. The dataset is extremely difficult and I have in brackets (expensive to prepare) and that is because each and every polygon within the forest, each and every attribute has to be digitized. That is a very laborious and expensive process. I estimate it would probably cost a hundred thousand plus to do the Iroguois Falls Forest.

The output -- the interpretation of output is considerable but the point to be made here is that it's much easier to look at that output than it is too look at output of OWOSFOP and FORMAN. OWOSFOP and FORMAN provide essentially a table of numbers to look at; whereas HSG provides the manager with a picture.

The manager can run the program 10 years into the future, have the program print out a picture of his forest and he can see what is happening to his land base. And a picture is worth a thousand words.

assumptions and that again is because it's so complex because the model is on a stand level basis. There is a very good correlation of regulation area and allocation area because of stand level. The thing about HSG - and this is really common to all wood supply models - is that growth and yield data is part of the most limiting factor; in other words, you need to depend upon an expert system to tell the model what is going to happen in a certain set of circumstances. The model doesn't have any sort of intrinsic understanding of growth and yield. That is something you have to work on.

It has, however, unlimited potential for enhancement. You can think of HSG as the foundation of an office building. That's going to be applying HSG, in my opinion, we are going to see technology advance in the future.

MR. CASSIDY: And the next overhead would be 1076G - I am sorry F. I'm sorry, Madam Chair, 1076G.

Farr & Associates Reporting, Inc.

_	EXHIBIT NO. 1076G: Hard copy of overhead entitled:
2	Relative Size of Datasets.
3	MR. SALTARELLI: This is just to
4	exemplify the differences in the datasets between the
5	three models. OWOSFOP was produced about 13 years ago,
6	has a dataset of about 6K, 6,000 bytes and it requires
7	two pages in lay terms copied on one side.
8	The FORMAN dataset is about twice as
9	complex, 12K, 12,000 bytes with four pages. The HSG
10	dataset, because it requires a GIS technology, has
11	about a hundred billion bytes, that is billion with a
12	"B", which translated into lay terms would be about
13	33-million pages.
14	So that is what I mean by a giant leap
15	forward in modern technology. It really exemplifies
16	that for the first time because of GIS we are able to
17	do this sort of thing.
18	MR. CASSIDY: Q. And we have entitled
19	that page?
20	MR. SALTARELLI: A. You can title that
21	Relative Size of Datasets.
22	Q. Thank you, Mr. Saltarelli. And can
23	you indicate why the industry is interested in the
24	development of these new methods of yield regulation
25	that you are talking about?

1

A. Yes. Thank you for waiting. The basic premise of modeling - I should get back to the basics here - is that modeling is a representation -- an artificial representation of a natural system and it allows the manager to effect changes in the artificial system to give him insights into how those changes will affect the natural system. So it's an invaluable tool.

There is probably no other way in which to effect wood supply analysis in the long term in computer modeling. It is an integral part of the timber management planning process to assess what the effects of management will be on long-term wood supply. It's also by definition a function of TMP planning to ensure that long-term wood supply.

The use of modeling such as these would provide the timber manager with the ability to determine what management strategies he should develop or should have.

It's a rapidly developing field, as you can see. It's going to be changed in six months and rapidly changed in another year, and we feel that somehow the planning process has to accommodate it. I don't think the planning process even hopes to catch up with it or keep pace with it but it should be flexible enough to accommodate it as it changes.

1 Q. Thank you, Mr. Saltarelli.

MADAM CHAIR: Excuse me. Just one question, Mr. Cassidy. Abitibi is a very large company and can possibly afford this sort of system. Do you see some other companies being in that sort of position?

MR. SALTARELLI: Yes. The great thing about computer hardware and software now is that the price is going in the opposite direction as development. As development is going sky high, the price is going down.

To give you an example, we acquired a geographical information system about a year ago and we decided that we would go with and IBM system and PC software, which is a personal computer, because it was less expensive than the corresponding mini-computer software and hardware.

Well, a year later it's now possible to get that mini-computer hardware and software at around the same price and the stuff runs four to five times as fast and does 50 times as much. HSG is now available on what is called the Sun work station using a UNIX operating system. There aren't a lot of people using that yet, but it's my understanding talking with Mr.

Moore at Petawawa that he's actively involved in

translating his model to a DOS program so anyone can use it. If you have an ordinary PC which is relatively inexpensive and you have a GIS you can run the program.

So the answer is I believe, yes, it's going to come to a point where virtually anyone can take advantage of this technology, but I would hasten to point out that it requires a bit of expertise to run. Everybody in the province can run OWOSFOP on a micro-computer, it's a very user friendly type of thing relative to FORMAN or HSG. There are perhaps a dozen or more offices or companies that can run FORMAN that have the expertise to actually take that program and plan with it.

The number of individuals or companies or agencies that can run HSG is very limited because it's brand new state-of-the-art and it's very complicated which is going to develop with the natural evolution of things.

MADAM CHAIR: With the use of HSG, do you spend any time looking at running FORMAN or OWOSFOP models to compare the data, the output to the HSG?

MR. SALTARELLI: If HSG is used for a timber management plan, we would run FORMAN or OWOSFOP, I should say, as a means to provide a method of comparison with other plans; in other words, just to

1	standardize the practice we would run OWOSFOP as a
2	matter of course.
3	If we had FORMAN and HSG side by side and
4	had the option to use one or the other and we were
5	equally capable of using one or the other, we would
6	more likely use the HSG model because it's more
7	precise.
8	Yes, Mr. Martel?
9	MR. MARTEL: Because the HSG model is so
10	much well, it seems to offer so much more than
11	OWOSFOP and I think you said that the Ministry has not
12	been pushy as to what system one uses; in other words,
13	as long as the data from one could relate to the other,
14	I believe, in fact companies could use what they want.
15	What happens now, if this model is so
16	much superior to OWOSFOP is terms of what it can
17	indicate out there, what happens to the relationship
18	between what MNR is using and what someone a company
19	like your own is using in terms of feeding the data
20	back and forth?
21	MR. SALTARELLI: First of all, it's
22	incumbent on the company to rationalize the use of any
23	model they use other than OWOSFOP, that's understood.
24	MR. MARTEL: Yes.
25	MR. SALTARELLI: I believe I tried to

point out that HSG is so complex that not everyone is going to be geared up to using it. In fact, there are very few people who are going to be geared up to using it at first. Even if it is a much superior model doesn't mean that it's going to be used universally because, first of all, the cost of preparing the dataset is quite large, at least now it is, that could come down significantly in the future, but at the time being it is a very expensive model just to get up and running.

So I believe your question has to do with why doesn't HSG become the standard.

MR. MARTEL: Well, I see that becoming the standard based on the fact that it does so much more. I am actually wondering what happens to everybody else out there, including the Ministry who is using OWOSFOP which was developed many years ago which says — it tells you certain things based on certain assumptions but this one does so much more.

Somebody is going to have to keep up with somebody or someone is going to have to slow down and I don't think anybody is interested in slowing down, they are going to want other people to get in line.

MR. SALTARELLI: No, sir, it's full speed ahead and the Ministry is involved. The Ministry

1	was very much involved with the development of HSG and
2	it will be one of the first agencies that will import
3	HSG into its new systems. I don't know what it is
4	going to do with it, that's not for me to answer, but
5	they are going to have it.
6	Like I said, it's going to take a long
7	time for the technology maybe not a long time, it is
8	going to take some time for the technology to come down
9	in price that would allow everyone to use it. The big
10	cost of course is digitization of the dataset
11	MR. CASSIDY: Thank you, Mr. Saltarelli.
12	If we could move on then, Madam Chair. I
13	believe your intention is to take a break at
14	approximately 10:15; is it?
15	MADAM CHAIR: That's right. 10:10.
16	MR. CASSIDY: 10:10?
17	MADAM CHAIR: On the nose.
18	MR. CASSIDY: We are going to finish Mr.
19	Saltarelli shortly and we will be commencing with Mr.
20	Atkinson following that. It may be appropriate to take
21	the break once we complete Mr. Saltarelli before we get
22	into Mr. Atkinson. We will probably be about another
23	half hour of lead in his evidence. I am in the Board's
24	hands; I mean, we are prepared to push on.
25	MR. MARTEL: I think we are trying to

1	set if I might just say, maybe I am being pushy on
2	this; but I am trying to set it so that everyone knows
3	the time they can make their phone calls, when they can
4	receive their phone calls. It would make life a little
5	more civilized for everyone.
6	It might appear to be arbitrary, but I
7	think in the final analysis, based on my experience, if
8	you can set your timetable to something then it makes
9	life easier for everyone all along the line.
10	MADAM CHAIR: Let's keep going, Mr.
11	Cassidy, we will stop at 10:10.
12	MR. CASSIDY: Thank you.
13	Mr. Virgo, could you do the next overhead
14	please. This overhead can be found on page 43, Madam
15	Chair, of the witness statement, Exhibit 1072 and it is
16	in relation to Section 6 of the evidence entitled: The
17	Timber Production Policy.
18	Q. Mr. Saltarelli, could you please read
19	that into the record?
20	MR. SALTARELLI: A. Yes, Mr. Cassidy.
21	Madam Chair, Mr. Martel, the overheads reads:
22	"It is the position of Industry that
23	there is a need for a revised Timber
24	Production Policy formulated jointly by
25	MNR and the Industry, to identify future

1	regeneration levels and funding
2	commitments necessary to meet anticipated
3	wood supply requirements."
4	Q. And, Mr. Saltarelli, can you tell me
5	what the Industry's position is in the involvement of
6	the new TPP?
7	A. Yes. Essentially we believe that the
8	old forest production policy of 1972 is somewhat
9	outdated; that's in view of changing technologies and
10	mill processes, silviculture and information processing
11	such as what was just discussed, and there is a need
12	and perhaps, more importantly, the ability to develop a
13	new contemporary strategy.
14	We maintain the position that Industry is
15	one of the significant resource users out so we should
16	be involved in the production of the new timber
17	production policy.
18	Q. The Board in the scoping session
19	asked about the involvement of the industry in the
20	development of the new TPP. Can you discuss that,
21	please?
22	A. Yes. Industry has been advised by
23	the Ministry of Natural Resources that it will be
24	involved in some meaningful way in the production of
25	the timber production policy and we look forward to

1	that.
2	Q. All right. I understand that you
3	wish to refer now to some interrogatories that were
4	filed which are contained in Exhibit 1073, dealing
5	first I believe with Forests for Tomorrow No. 7?
6	A. Yes. This one is brief that I will
7	read it.
8	MR. CASSIDY: That can be found on page 9
9	of Exhibit 1073, Madam Chair.
10	MR. SALTARELLI: The question was:
11	"Why has the industry not proposed the
12	inclusion of other interests in the
13	development of the proposed new TPP?"
14	And our answer is that we have no
15	objection at all of the participation of other parties
16	in the development of that.
17	MR. CASSIDY: Q. If I can just stop you
18	there.
19	MR. MARTEL: There is a page missing from
20	Mrs. Koven's package.
21	MADAM CHAIR: My 1073 stops at page 8.
22	MR. CASSIDY: I have a full set here. I
23	apologize, Madam Chair. (handed)
24	Q. I'm sorry, Mr. Saltarelli
25	MP CALTAPPLLIT. A Rest little plan

1	Mr. Cassidy.
2	Q. If you could perhaps take that from
3	the top.
4	A. Certainly. The question reads, Madam
5	Chair, Mr. Martel:
6	"Why has the industry not proposed the
7	inclusion of other interests in the
8	development of the proposed new TPP?"
9	And our answer was, we have no objection
.0	to the input and participation of other parties and we
.1	cited as part of that response, again, our Panel 10
.2	evidence on planning which speaks to the formulation of
.3	Advisory Committees, a wide array of resource users.
. 4	Q. Thank you. I understand you wish
.5	also to refer to another interrogatory filed by the
.6	Ministry of the Environment?
.7	A. Yes, this is No. 6.
. 8	Q. And that can be found on page 8,
.9	which I hope you have, of Exhibit 1073.
0	A. The interrogatory had to do with how
1	the industry perceived the TPP being implemented at the
22	local or stand level, and part of that interrogatory
23	also had to do with the flexibility that we felt had to
2.4	be built into the TPP. Our response was that:
25	"While timber management at the stand

1 level will affect the achievement and targets identified in the TPP, the Policy 2 3 itself would not be implemented at the..." local or... "stand level." 4 5 We envisaged that it would be developed 6 for the province based upon management unit data that 7 are provided by the management unit and that the TPP would allocate specific targets back to the management 8 9 units. 10 And, again, we refer to our Regional 11 Inventory Resource Users Committee as being the best equipped to decide how to accommodate those targets, 12 13 that is in the second part part of that interrogatory. 14 We maintain that the TPP would set out a 15 general course of action; in other words, it would not 16 specifically tell each management unit manager how to 17 achieve the targets; that will be up to him or up to 18 the committee to decide. It would only identify the 19 targets that each individual manager would have to 20 strive to achieve. 21 Q. Thank you, Mr. Saltarelli. MR. CASSIDY: Madam Chair, that completes 22 23 Mr. Saltarelli's evidence. 24 If I could just have your indulgence to 25 speak to Mr. Lindgren at this time.

1	Discussion off the record
2	MR. CASSIDY: Thank you, Madam Chair. I
3	would like to turn now to Mr. Atkinson and his evidence
4	is found in Appendix A of the witness statement,
5	Exhibit 1072 and can be found at pages 45 through 60
6	entitled Sawmilling Wood Supply Requirements.
7	Mr. Atkinson, I understand you are the
8	President of Great West Timber?
9	MR. ATKINSON: A. That's correct, Mr.
0	Cassidy.
1	Q. And I understand that is a sawmill
2	and tree plant here in Thunder Bay?
3	A. That's right.
4	Q. And how many people does it employ?
5	A. 225 employees in the mill plus about
6	250 in the woodlands.
7	Q. Mr. Atkinson, can you summarize
8	briefly for the Board the history of sawmilling as
9	discussed in your evidence?
0	A. The history of the kind of sawmilling
1	that I'm involved in - that is known as the softwood
2	sawmilling industry in Ontario - is that it began in
3	the boreal forest in the 1920s with fairly rudimentary
4	mills, but those mills made a significant contribution
5	to the development and opening of northern Ontario, as

1 they still do.

The industry progressed through the intervening period with many remarkable improvements, mainly designed to increase the productivity, to reduce costs, use the available species and sizes of trees in the province up to the present, which I will touch on later under technology.

This industry in northern Ontario made a significant contribution to the accumulation of capital as did the pine industry in the Ottawa Valley much earlier in the history of forestry in Ontario.

We now have an industry in Ontario that in softwood produces about two billion feet annually of mostly what we call SPF lumber, which is spruce, pine and fir and that's a grade species designation that's used in the trade, and also significant amounts of red and white pine, hemlock and some other minor species.

Q. Mr. Atkinson, can you summarize briefly your evidence in respect of the various products that sawmills produce.

And for the Board's reference that evidence can be found commencing at page 48 of the witness statement.

A. Madam Chair, the principal product produced by softwood sawmill in Ontario is SPF

construction lumber. This is lumber in sizes such as 2 x 4, 2 x 6, 2 x 8, 2 x 10, in lengths from 6 feet to 12 feet which is principally used in construction and remodelling of housing units and in all kinds of construction that is forming in industry as pallets and other industrial products and mill work and many other 7 products.

1

2

3

4

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

This product is graded according to visual characteristics in order to grade it into strength classes and the grading system is harmonized throughout North American, so the product that we make in Ontario can be sold throughout Canada and throughout the United States without any contest as to whether it is suitable.

The other products are timbers, which are defined as a piece of wood that is more than four inches by four inches in cross-section dimension and this would include products for mine timbers, landscaping, framing of large buildings and railway ties, as we mentioned before.

These products are very important in upgrading the resource that we have in Ontario to the best end use and contributing enough to the sawmill to pay its bills. We also in manufacturing lumber produce a lot of what we call pulp chips and --

1	Q. I understand that you have some
2	examples of pulp chips which you would like to
3	illustrate to the Board?
4	A. Yes, Mr. Cassidy. Madam Chair, this
5	is a small sample of pulp chips which have been
6	screened and prepared for the kraft pulp industry. It
7	is interesting that approximately 50 per cent of the
8	sawlog wood that we put into our sawmill comes out as
9	pulp chips. Because logs are round nad lumber is
10	square there is quite a bit of product that has to be
11	used for something besides lumber.
12	It is a very significant contribution to
13	the economy of a sawmill and I think it's quite
14	valuable to the pulp industry as well.
15	Q. If I can just stop you there and have
16	that filed as an example, Mr. Madam Chair, a bag of
17	pulp chips and that will be Exhibit 107
18	MADAM CHAIR: Seven.
19	MR. CASSIDY: Seven. Mr. Atkinson will
20	you mark that on that bag.
21	EXHIBIT NO. 1077: Bag containing pulp chips.
22	MR. CASSIDY: Madam Chair, Mr. Pryke
23	intends to refer to that bag in his evidence later and
24	as soon as he is done with it we will put it up for you
25	to have a closer look at it, unless of course you wish

1	to it now.
2	Madam Chair, if we could then continue
3	with Mr. Atkinson.
4	Q. Any other examples you have?
5	MR. ATKINSON: A. Madam Chair, we also
6	produce other products in the process of producing
7	lumber. In this example here, we have a mixture of
8	sawdust and shavings which is also used in one of the
9	northwestern Ontario mills for the production of liner
0	board which is used in corrugated boxes, and this
1	product combines sawdust and shavings, is about 15 per
2	cent of the input of sawlog wood into our sawmills as
.3	an average.
4	Q. You are referring to a second bag you
5	have in your hand which you would call a bag of what,
.6	Mr. Atkinson?
7	A. Sawdust and shavings.
.8	MADAM CHAIR: That's Exhibit 1078.
9	MR. CASSIDY: Thank you.
0	MADAM CHAIR: Did you say that's 15 per
1	cent of the output of sawmills?
2	MR. ATKINSON: That's correct, Madam
13	Chair.
4	EXHIBIT NO. 1078: Bag containing sawdust and shavings.

1	MR. CASSIDY: Q. Is that the output of
2	your particular mill or a typical mill?
3	MR. ATKINSON: A. That would be the
4	output of a typical mill.
5	Q. And you have a third bag which you
6	wish to discuss?
7	A. Yes. We also debark the logs and I
8	have here an example of spruce and jack pine bark which
9	has been shredded to make it more suitable for boiler
10	fuel or for horticultural mulch.
11	In the case of Great West Timber, we
12	market most of our bark as boiler fuel, but we also
13	ship - and by ship I mean a ship load - of bark into
14	Detroit every year which is used for horticultural
15	mulch.
16	MR. CASSIDY: Perhaps we can mark that
17	bag as Exhibit 1079.
18	Q. The bag of bark?
19	A. That is correct.
20	EXHIBIT NO. 1079: Bag containing bark.
21	MADAM CHAIR: Should we have our morning
22	break now, Mr. Cassidy?
23	MR. CASSIDY: Madam Chair, would that be
24	for 15 minutes?
25	MADAM CHAIR: I think it's 20 minutes;

1	isn't it.
2	MR. CASSIDY: 20 minutes.
3	Recess taken at 10:10 a.m.
4	On resuming at 10:30 a.m.
5	MADAM CHAIR: Please be seated.
6	MR. CASSIDY: Madam Chair, could you
7	advise me of the time you intend to break for lunch?
8	MADAM CHAIR: At twelve o'clock.
9	MR. CASSIDY: Thank you.
10	Q. Mr. Atkinson, I would like to come
11	back to you. And is there anything you wish to add in
12	respect to my question regarding the sawmill products
13	that your company has produced or your industry
14	produces?
15	MR. ATKINSON: A. I think I have covered
16	most of the products to the degree that we need to
17	cover, Madam Chair.
18	I would just like to put in a few remarks
19	about how we sell lumber. Essentially our salesmen
20	pick up the phone and they call a customer and they try
21	to arrive at a price. This is called a commodity
22	market, softwood lumber is a pure commodity. There are
23	probably 2,000 producers in North America of some size
24	and 50,000 customers or something in that order when
25	you get right down to the retail level.

1	So that really there is always the lumber
2	market, the only question is kwho is going to be in it
3	and the people who are in it are the ones that are able
4	to keep up with the rat race which is a continuous
5	upgrading of facilities, thinking of better ways of
6	manufacturing and shipping, and getting the logs out of
7	the bush. And a very important point that we as the
8	industry try to make here is that we need flexibility
9	in our log supply so that when there is a certain
10	market such as railway ties or timbers, we can go and
11	cut fresh logs that are suitable for that market and
12	not be tied down to a fixed supply that we have to cut
13	in a certain order in a certain year or certain month
14	or something like that.
15	MADAM CHAIR: Excuse me, Mr. Atkinson,
16	you mean by location.
17	MR. ATKINSON: By location or by stand
18	characteristics, the size or species in a particular
19	stand.
20	MR. MARTEL: How does that tie in then to
21	a five-year plan?
22	MR. ATKINSON: That is what we wrestle

We would try to save or store on the stump, if you like, large jack pine trees so that we

with, Mr. Martel, or a 20-year plan for that matter.

1	have them available to produce railway ties when that
2	market is available, as an example.
3	MR. CASSIDY: Mr. Martel, as I think you
4	may be aware, the industry's planning panel will be
5	dealing with the issues related to that, following up
6	on some of the matters you have heard here and will
7	hear in respect of other of the industry's evidence.
8	MR. MARTEL: I read that panel but just
9	here we are talking about quick adjustments and I am
10	just not sure how it even fits into the plan as in 10 I
11	guess it is, how that flexibility is built in.
12	MR. CASSIDY: Well, I will be happy to
13	make a note of your question and make sure we address
14	this. This is almost a pre-Panel 10 scoping session
15	then.
16	MR. MARTEL: All right.
17	MR. CASSIDY: Thank you. Perhaps I might
18	just take a moment, Madam Chair, and if Mr. Dadds can
19	hear me, it might be worth his making yet another
20	effort to see if we can adjust the microphone that Mr.
21	Atkinson has, if possible.
22	Discussion off the record
23	MR. CASSIDY: Q. Mr. Atkinson, at page
24	51 and 52 of your evidence you refer to the standards
25	that chips should meet for various things such as

1	species size, thickness, and rot. Could you explain
2	those standards or the particular demands on your
3	industry in terms of chips?
4	MR. ATKINSON: A. Yes, Mr. Cassidy, and
5	Madam Chair. The production of chips demands that we
6	produce a certain size, certain thickness and screen
7	out small material that isn't suitable or large
8	material that isn't suitable.
9	The chips have to be bark free which is a
10	considerable part of our production machinery. They
11	are not allowed to have any charcoal in them from
12	forest fires or something like that. The species is
13	sometimes sorted, we do that in our mills, so that we
14	have pure spruce chips to supply to newsprint mills.
15	The chips have to be fresh, free of contamination, and
16	that is what we seldom sell to the paper companies.
17	MADAM CHAIR: Excuse me, Mr. Cassidy, I
18	have been told if the other witness panel members would
19	turn off their mikes it might clear up.
20	MR. CASSIDY: They are all off.
21	Discussion off the record
22	MR. CASSIDY: Q. Mr. Pryke, I understand
23	that in your evidence you will be explaining some of
24	those requirements that Mr. Atkinson has referred to?
25	MR. PRYKE: A. Yes, I will.

Q. Mr. Atkinson, could I then turn you
to Section 3 of your evidence commencing at page 52 and
ask you to describe the wood supply requirements that
your industry has?

2.2

MR. ATKINSON: A. The sawmill industry as it exists in northern Ontario now, the softwood sawmill industry, when it goes to get logs for its mills carries out its operations in much the same way as a pulp mill. We are allocated certain stands and we make our plans and build the roads and go and cut whatever species and size of material that is available there and turn it to the best possible end use that we can.

This means that our log supply is generally of fairly small diameter in northern Ontario and our mills have been built to handle it, but we don't go out and select large trees as the sawmill industry used to do many years ago.

The requirements for good sawlogs are that they be fairly straight, that their diameter be four and a half inches at the small end or larger because the diameter determines the markets you can be in. If your logs are all small you can't make 2 by 8s or 2 by 10s which is one of the better products.

The quality of the logs should mean that

there is not excessive rot or crook in the logs and if
there is a lot of taper in the log you don't get much
recovery from it. Generally logs in northern Ontario
have about two inches taper for every 16 feet and that
is quite a bit, it's twice as much as in British
Columbia interior for instance. So that the less taper
you have, the better recovery you get out of the log.

We can't do much about taper, but we can do something about cutting the crooked parts out of the log before we introduce it to our mill.

MADAM CHAIR: Excuse me, Mr. Atkinson.

Does your company do any selection harvest or modified harvest in reserve areas?

MR. ATKINSON: My field of expertise,
Madam Chair, doesn't include much about what we do in
the woodlands. I think that could be dealt with in
another panel.

MR. CASSIDY: Madam Chair, we do not intend to produce a witness from Mr. Atkinson's company in another panel, however if you were to ask that question about harvest activities generally in the boreal forest of our harvest witnesses, I am sure that one of them can discuss that with you, since at least one of the case studies that I have referred to in that panel addresses forest conditions similar to Mr.

1	Atkinson's company.
2	Q. Yes, Mr. Atkinson. I believe you
3	were discussing log quality. Is species important?
4	MR. ATKINSON: A. Yes. We don't have
5	too many species to work with in northern Ontario, but
6	we prefer to have jack pine and black and white spruce.
7	We also harvest some balsam fir, but because balsam
8	tends to start to decline at an early age, there is a
9	significant amount of defect in it, particularly in the
10	larger size of logs.
11	It's also very, very difficult to dry, to
12	the extent that we can't mix it with spruce and pine,
13	we either have to sell it as green lumber which means
14	we don't dry it or spend a great deal of money trying
15	to dry it.
16	Q. If that is the case then, Mr.
17	Atkinson, why do you harvest balsam fir?
18	A. Well, it's because it's in stands
19	that we are harvesting. If we don't take it is either
20	damaged or left behind and it makes regeneration very
21	difficult and for that reason we, when we are operating
22	in mixed stands, we try to take the balsam.
23	Q. And could you indicate to me again
24	what are the preferred species?
25	A. Some preferred species are jack pine

1	and white spruce and black spruce.
2	Q. And jack pine is preferred for what?
3	A. Well, it's a product that treats very
4	well and both of our sawmills in Thunder Bay have
5	treating plants and it's used for other products that
6	are treated as I mentioned before.
7	Q. And the spruce is preferred for what?
8	A. Spruce makes very high grade framing
9	lumber for house construction and other construction
10	and for mill work.
11	Q. And do technological developments
12	impact on wood supply requirements?
13	A. They have for years in the sense that
14	technology allows us to use smaller and smaller sizes
15	of logs by producing machines that are fast and capable
16	of handling small logs, yes.
17	Q. And can you tell me a bit about the
18	harvesting for sawmills that goes on, just briefly?
19	A. Well, I think I mentioned that when
20	we log we log the way everybody else does in northern
21	Ontario including the pulp mills, we cut the species
22	that are on the site and make the best use we can of
23	them, because if we don't take them the first time
24	around they blow over or something before we can get
25	back and pick them up again.

1	Q. Yes.
2	A. Was there anything else that I was
3	going to explain on that?
4	MR. CASSIDY: No. If I can
5	MR. MARTEL: I am just wondering, you cut
6	everything to help in terms of regeneration. Is there
7	any of the logs that you just sell to someone else;
8	maybe they are too small for your industry, that you
9	sell for pulp to somebody else?
.0	MR. ATKINSON: Yes. When we slash the
.1	trees into logs in the bush we sell the smaller
.2	diameters as rough pulp to the paper companies, yes,
. 3	and we also trade sawlogs to a considerable extent for
4	chips, particularly here in Thunder Bay, the paper
.5	companies produce sawlogs for us and we return chips to
.6	them, which is a very good arrangement.
.7	And I should say that I think we have a
. 8	very good relationship ongoing with the major pulp and
.9	paper companies for which we are very thankful.
20	MR. CASSIDY: Q. Mr. Atkinson, if I
21	could just close with you by asking you if members of
22	your industry are involved in forest management
23	agreements?
24	MR. ATKINSON: A. Yes, we are. In our
25	own company we have a forest management agreement north

1	of Sioux Lookout for what we call our McKenzie Forest
2	Products Division and we are also operating the Black
3	River Forest east of Manitouwadge and there are other
4	FMAs in the forest at Hearst and Chapleau.
5	MR. MARTEL: Who prepares your is that
6	a Crown unit?
7	MR. ATKINSON: No.
8	MR. MARTEL: An FMA, pardon me. You do
9	all the planning, you have your own planning foresters
10	doing the planning and everything there?
11	MR. ATKINSON: Yes, we do, Mr. Martel.
12	MR. MARTEL: How small would a company
13	get before it reaches a point that it can't really do
14	that sort of planning itself?
15	We heard some complaints last week - I
16	think they were complaints - about industry, certain
17	aspects of industry not being in the same league, if I
18	can use that term, with some of the bigger companies.
19	How small do you get before you really
20	can't engage in the type of planning or employ the type
21	of people required to do the planning, particularly in
22	your type of industry where much of it is very small
23	wood?
24	MR. ATKINSON: I am not sure precisely
25	where that mark would be, Mr. Martel, but I think when

1	you do arrive at that point there are consulting
2	foresters who are available to handle your planning and
3	so on.
4	MR. CASSIDY: Q. Mr. Saltarelli I am
5	sorry, sir.
6	MR. ATKINSON: A. Excuse me.
7	Q. I was just going to indicate, Mr.
8	Martel, that Mr. Saltarelli has background in timber
9	management planning and may be of some assistance to
10	you.
11	MR. SALTARELLI: Yes. Let me answer the
12	question for you.
13	I would cite two private companies,
14	Superior Forest Management and Hearst Forest
15	Management, and these are very small management
16	companies in essence that do the planning and
17	administration of forests, small groupings for a
18	grouping of small sawmills. So in essence there is no
19	size.
20	MR. CASSIDY: Mr. Lafreniere I believe
21	gave evidence in that respect.
22	MADAM CHAIR: Yes, we heard that there
23	were two company owned jointly owned
24	MR. MARTEL: I guess my concern though is
25	we haven't moved ahead, we have reached a certain level

with FMAs and I don't think from the point we reached it to completing what I think was the intent has occurred with respect to MNR in terms of entering FMAs with the other part of the industry that is not involved.

1 2

I wasn't sure if that was one of the reasons why we haven't gone the whole -- except for of course Crown management units.

MR. SALTARELLI: I am not sure what the reason was. You are correct in your statement that we haven't gone as far -- the Ministry did not go as far as was originally intended.

It is my interpretation - I stand to be corrected - that had a lot to do with funding. The cost of the FMA program is quite high and the current level of funding which is not an extension -- has not been able to allow an extension of that program.

MR. CASSIDY: It may be appropriate -- I am not sure if we can assist much further.

MR. MARTEL: No, from the company's perspective I want to know whether the companies - because I think the information we received during the hearing to this point was, we got to a level and while there was interest in achieving more in terms of FMAs that hasn't occurred, and I was just wondering from the

1 company position...

MR. FREIDIN: Mr. Martel, for my purposes I am wondering whether you could explain what you understood the evidence or the intent of MNR was? You said you thought they had a certain intent but didn't go as far as -- could you please respond to that?

MR. MARTEL: I thought the interest was to get as many companies involved in FMAs so that the whole of harvesting and regeneration could be done as much as possible by the same individual, by the same corporation, whether it was the Crown doing it all, but the intent was to get more and more of the companies involved.

And I think in the last three or four years -- I might be wrong, but the last three or four years we have reached a level and I don't think there has been much progress in getting the last of the companies who are outside the agreements involved.

MR. FREIDIN: I think I would have to direct you to the evidence of an earlier panel and I will provide you with that, and that was that there was not an intention that all the units become forest management agreements, that there is a useful purpose to be served by retaining Crown management units.

I will refer you to that specific

evidence that was led I believe in Panel 2 or 3 on 1 2 that. MR. MARTEL: But I thought included in 3 there there was some large companies that still weren't 4 5 involved. MR. FREIDIN: I will see if there is some 6 evidence on that as well. If I can't provide all the 7 information, then I will have to reserve the subject 8 matter for reply evidence. 9 10 MR. MARTEL: All right, thank you. MR. FREIDIN: Okay. 11 MR. CASSIDY: That completes Mr. 12 13 Atkinson's evidence, Madam Chair, Mr. Martel and, therefore, I would like to move on. 14 15 Q. I trust that completes your evidence, Mr. Atkinson? 16 17 MR. ATKINSON: A. Mr. Cassidy, maybe I 18 should just say one ... 19 0. Certainly. 20 A. A little bit about technology in the 21 sawmill industry, if I may, Madam Chair. 22 The sawmill industry is an old industry 23 but I think it's fairly well up to date on what it's 24 attempting to do with the available tools we have now 25 and data processing and computers and so on.

L	What we are working on now is methods of
2	reducing the amount of sawdust we produce by using
3	thinner saws. We have methods of sensing sizes of logs
1	and where to cut them, we have systems of sorting
5	lumber and we are working as an industry on systems of
5	identifying species, sensing the moisture contents in
7	lumber so that we can do a better job of drying it and
3	many other initiatives like that, including grading
9	lumber with machines.
)	Grading is a very fine art, I should say,
1	and if you don't grade your lumber correctly you don't
2	get the value from it that you should. So that is some
3	of the things that we are working on now.
4	Thank you, Madam Chair.
5	MR. CASSIDY: Thank you, Mr. Atkinson.
6	Now, we have completed Mr. Atkinson's evidence. I
7	would like to move on to Appendix B, Madam Chair, and
8	that will be addressed by Mr. Magee who is sitting
9	beside Mr. Atkinson.
0	The Appendix B can be found at pages 61
1	through 72 of the wood supply witness statement,
2	Exhibit 1072 and as titled: Waferboard Wood Supply
3	Requirements and Factors Affecting Woodshed Limits.
4	Q. And, Mr. Magee, could you begin with
5	a brief explanation of the history of the waferboard

2 2 2

1	industry in Ontario?
2	MR. MAGEE: A. Thank you, Mr. Cassidy
3	and Madam Chair.
4	The waferboard industry in Canada in fact
5	in the world began in Saskatchewan in 1961. The first
6	waferboard mill in Ontario was built in Timmins in 1973
7	and in the mid-70s waferboard mills were built in Long
8	Lac and two were built in Thunder Bay.
9	Grant Forest Products waferboard mill in
10	Englehart came on stream in 1981 and since then has
11	done an expansion in 1988 making it the larget oriented
12	strand board and waferboard complex in the world. The
13	two mills in Thunder Bay have closed.
14	Q. All right. With respect to the mill
15	you mentioned in Timmins that opened in 1973, is that
16	the mill that the Board viewed in their
17	A. Yes, the Mallette Waferboard Mill.
18	Q. And I understand with respect to the
19	closure of the mills that you have referred to, you
20	wish to refer to an interrogatory from the Ministry of
21	the Environment that dealt with that issue.
22	MR. CASSIDY: And that is Interrogatory
23	No. 8 on page 10 of the Exhibit 1073, Madam Chair.
24	Q. And I understand you wish to discuss
25	that, Mr. Magee?

1	MR. MAGEE: A. Yes. I will go through
2	the interrogatory. The questions were:
3	"(a) Please elaborate on the reasons why
4	the two waferboard mills in Thunder Bay
5	closed."
6	And:
7	"(b) Please explain why it was not
8	feasible to convert these mills to
9	oriented strand board."
10	The reason given by both companies were
11	high wood costs. Competition from the local pulp mill
12	also using poplar blew up the price of poplar where it
13	was too high to be profitable for the making of
4	waferboard. Profit levels were inadequate to provide
15	sufficient return on the investment requirement to
16	modernize both mills.
17	One mill did convert to OSB, however, it
18	was not competitive and decisions were made in both
19	cases not to keep the mills open or to modernize
20	because of the wood costs.
21	Q. Now, I understand you wish to provide
22	the Board with some examples of the products that the
23	waferboard industry produce.
24	A. Yes, Mr. Cassidy. I have with me
25	here a piece of waferboard. Waferboard is a commodity

1	product, it's used mainly in the construction industry
2	for sheeting, roofing and flooring. It's made from a
3	waterproof glue.
4	MR. CASSIDY: All right. If we could
5	mark that as Exhibit 1070.
6	MADAM CHAIR: 1080.
7	MR. CASSIDY: I am sorry, 1080, one
8	sample of waferboard if it's possible to write on
9	there.
10	EXHIBIT NO. 1080: Sample of waferboard.
11	MR. CASSIDY: Q. And the next sample
12	that you have, Mr. Magee?
13	MR. MAGEE: A. I have here a sample of a
14	piece of plywood. Plywood is again a construction
15	material, it competes with waferboard or waferboard
16	competes with it. The veneer is taken from high
17	quality logs. A knife against the log on the lathe
18	takes off a thin piece of veneer. These veneers are
19	glued back together to form plywood.
20	In this case there are two plies, two or
21	three plies, and the centre ply is laid at right angles
22	or across to the face layers.
23	This particular piece is a piece of bass
24	and plywood. It's quarter inch, made in Ontario, it's
25	the kind that would normally be used for underlay in

1	flooring. Some plywood is also used or what they
2	call the industrial grade, is further used for
3	furniture or kitchen cupboards.
4	MR. CASSIDY: And that will be Exhibit
5	1081, one sample of plywood.
6	EXHIBIT NO. 1081: Sample of plywood.
7	MR. CASSIDY: Q. Would it be accurate,
8	Mr. Magee, to describe that as one sample of plywood
9	produced by waferboard?
.0	A. No.
.1	Q. One sample of plywood?
.2	A. One sample of plywood.
. 3	Q. And your next sample?
. 4	A. My next sample is a piece of
.5	particleboard. This sample came from Rexwood Products
.6	in Haileybury. Particleboard is made from aspen and in
.7	this case planer shavings, spruce pine and fir planer
. 8	shavings from sawmills.
.9	It's a layer board with a finer material
20	on the outside and some of the more course stuff on the
21	inside. It's made with a glue which is not really
22	considered waterproof but water resistant and used
23	mainly for interior use.

covered with a plastic or a paper or a thin piece of

24

25

The same board sometimes thinner is

1	wood veneer and used in furniture components. It's
2	quite often used as countertops and encompasses
3	cupboards made of melamine.
4	I would think that cabinet in front of
5	the Board table has got particleboard underneath that
6	plastic veneer.
7	Q. And the next
8	MR. CASSIDY: That will be Exhibit 1082,
9	I believe one sample of particleboard.
10	EXHIBIT NO. 1082: Sample of particleboard.
11	MR. MAGEE: This is a sample of oriented
12	strand board. You'll notice the wafers are not square
13	and randomly arranged as in the sample of waferboard,
14	but they are in strands or smaller pieces, longer than
15	they are narrow. These are 4 inch strands in this
16	particular sample.
17	MR. CASSIDY: That will be Exhibit 1083,
18	sample of graded strand board.
19	EXHIBIT NO. 1083: Sample of strand board.
20	MR. CASSIDY: Q. Is that also known as
21	OSB?
22	MR. MAGEE: A: Yes, that's correct.
23	Q. Are those all the samples you have at
24	this time?
25	A. Yes, it is.

1	MR. CASSIDY: Madam Chair, I will bring
2	these up so you can have a closer look.
3	MADAM CHAIR: Thank you.
4	Mr. Magee, what is the difference in
5	prices among those products?
6	MR. MAGEE: I'm afraid I can't give you
7	an answer on that; I am in the wood supply end of it.
8	I think the local building supply could yeild some
9	answers pretty quick. The waferboard people are very
10	quick in saying that waferboard it's cheaper to
11	build your house with waferboard than with plywood.
12	MADAM CHAIR: Thank you.
13	MR. CASSIDY: Q. Mr. Magee, could you
14	tell us or explain the process briefly of how these
15	products are manufactured?
16	MR. MAGEE: A. Yes, I'll specifically
17	speak about the waferboard.
18	Q. Just hang on a second, Mr. Magee.
19	MR. MARTEL: Could you just give me a
20	little bit more explanation between the difference of
21	the first waferboard you showed us and the oriented
22	strand board?
23	MR. MAGEE: Certainly. I hit it again
24	several times, but we can go on to it now. The strand
25	board, as you see, the surface layers are longer and

thinner, which are strands, and it gives more strength in the one plane. Conceivably, the thinner layer could go right into the cross ways or they often can be oriented in the same direction to give much greater strength in one direction which would be across your four joists. You could have greater four joists band with OSB than with waferboard.

In fact, the OSB competes in the American market with the American plywood. It is graded under the APA grading rules and it has entered the American market quite well. Most of the mills in the U.S. are capable of making the strand board.

As I mentioned, the wafers are bigger, there's surface layers laid down and then a core and then another surface layer. The strands can be four inches in size or some strands can be made longer.

MR. CASSIDY: Q. I understand you wish to refer to or describe briefly the process by which these products are made and you have an overhead which you would like to present to the Board.

Madam Chair, that overhead, a hard copy can be found on page 72 of the witness statement.

Perhaps I think it will be necessary for Mr. Magee to refer to the overhead directly to give you some background.

1	MR. MAGEE: A. The wood which is 100 per
2	cent aspen, I'm speaking for all the mills in Ontario,
3	enters the woodyard and must pass through a slasher, if
4	the wood is compiled in tree lengths or it's compiled
5	into desired lengths, such as eight foot or sixteen,
6	that the mill can handle and it is stored. From the
7	slasher, the wood goes through a debarker where the
8	bark is removed and then in the hot ponds.
9	The hot ponds are necessary for
10	conditioning, particularly in the winter to get the
11	frost out so the logs are able to cut into wafers.
12	From the hot ponds, the material goes to
13	the waferizer. The waferizer cuts these pieces of
14	wafers that are approximately 30,000 and an inch thick.
15	It does not make chips, it's a very selective type of
16	machinery designed to make not too many fines.
17	There are storage bins after the flakers
18	and then it goes to the dryers. The dryers bring the
19	moisture content from about 50 per cent down to a three
20	to four per cent. Again, some storage bins and some
21	screeners, some screens. The screens remove the
22	smaller particles.
23	Q. Where do they go? Are those the
24	fines?
25	A. Those are where we have fines here,

1	yes, coming out.
2	Q. Where do they go?
3	A. The fines, in the case of the Grant
4	mill, are sold to a local particle board mill or to a
5	pulp mill for hog fuel. At the Mallet waferboard mill
6	the fines are used in-house to make particle board.
7	Q. I think you were at the screens part
8	of it.
9	A. Yes, thank you. The screens, the
10	blender, there is resin and wax added at the blender
11	and then onto the forming line. The forming line is a
12	moving belt where the surface layers are laid down
13	first. They can be oriented if they're strands, and

15

16

17

18

19

20

21

22

23

24

25

press.

The time in the press depends upon the thickness of the panel. The thicker panel takes a proportionally longer time for the glue and the core to cure. From there, the wood goes to the trim saws and stacker and to the warehouse.

then a centre or correlator put on and then another

surface layer laid down, and then they go into the

- Q. The dryers, Mr. Magee, what is the energy source for the dryers?
- A. The energy source for the dryers in the Grant mill is fuel, the bark that is taken from the

1	logs. There is quite a high demand for heat in the
2	mills. The press takes an awful lot of the heat, as
3	well as the hot pond particularly in the winter time.
4	Q. Thank you. Mr. Magee, can you
5	explain to the Board what the species is that is used
6	for the production of these products in Ontario?
7	A. Yes. In Ontario the species used is
8	a hundred per cent aspen poplar.
9	Q. And are there any species or any wood
.0	supply or fiber requirements for your products?
.1	A. Waferboard mills can use quite a
.2	large range of quality of wood in aspen. There are
.3	some physical limitations which mills have because of
. 4	their debarkers or their waferizers; there may be a
.5	maximum or minimum size they can take. Other than
.6	that, the logs should be reasonably straight and
.7	branches cut off and free of forks.
. 8	The core of every tree or small tree is
. 9	juvenile wood, is wood laid down when the tree was
20	bending, it had branches on it and the smaller radius
21	of the annual ring makes for poor wafers. The wafers
22	tend to break and more fines are made. The better
23	wafers come from the bigger logs, just like lumber.
24	A mill can use smaller logs and wood with
25	quite a bit of rot, but it can't'run solely on that

type of tree. It has to have good wood to mix in entry of the mill.

- Q. I would like to refer you to Section 6 of your evidence on page 64 where you talk about improved mill utilization. Would you describe for the Board what developments there have been to your mill or your industry?
- A. Yes. The improvements in the board industry have been that a lot of the earlier problems with waferboard, such as the disswelling or linear expansion and delamination have been taken care of.

 There is better glue and better quality control in the mills.

As well, there is ability to make the oriented strand board. The strand board can be made with less wood. Those larger wafers oriented, the panel doesn't have to be pressed or made with as much wood. It doesn't have to be pressed as dense or made with as much as wood, so the same square footage or number of panels could be made using less wood with the OSB.

- Q. Can you just briefly explain the OSB orientated strand board and developments in it?
- A. Yes. Further, the larger wafers can be made into stronger material. I have with me here a

1	sample of some thicker board. This is a thicker piece
2	of waferboard, about an inch and a half thick.
3	Conceivably with or it has been tried
4	with longer wafers laid down in a mat and all oriented
5	in the same direction and then the panel cut into
6	lumber size. Certainly not the smaller sizes, but 2 x
7	12s, 2 x 14s. Indications are that the strength
8	properties are quite good. The press is 24 feet long,
9	so pieces of lumber could be made 24 feet long of quite
10	large width.
11	MR. CASSIDY: And perhaps we could that
12	mark that sample as Exhibit 10
13	MADAM CHAIR: 84.
14	MR. CASSIDY: Thank you, Madam Chair. A
15	sample of
16	Q. What would you call that, Mr. Magee.
17	MR. MAGEE: A. That is a sample of inch
18	and a half waferboard.
19	EXHIBIT NO. 1084: Sample of inch and a half waferboard.
20	walelboald.
21	MR. MARTEL: Mr. Magee, I am the
22	customer, can you tell me why something can't be done
23	to ensure that where legs are put into waferboard the
24	legs don't break off?
25	Do you understand what I'm saying? The

1	base
2	MR. MAGEE: I think you're talking about
3	particle board, but I will pass on that question.
4	MR. MARTEL: I'm in the wrong product; am
5	I?
6	MR. MAGEE: Yes.
7	MR. FREIDIN: Use those trees in your
8	backyard, Mr. Martel.
9	MR. MARTEL: I can't cut those down.
10	MR. CASSIDY: Q. Mr. Magee, I understand
11	you have some further samples of wafers you wish to
12	provide the Board?
13	MR. MAGEE: A. Yes, I have here some
14	samples of some two inch wafers. I have a sample of
15	some six inch strands and I have an example of some
16	fines, material that is removed in the screening
17	process. This particular example has quite a bit of
18	bark on it.
19	MR. CASSIDY: Perhaps we can file and
20	exhibit the two inches wafers a sample of two inch
21	wafers as Exhibit 108
22	MADAM CHAIR: Five.
23	MR. CASSIDY: Five. And the sample of
24	the strands as Exhibit 1086 and the sample of fines as
25	Exhibit 1087.

1	MR. CASSIDY: (handed)
2	MADAM CHAIR: Thank you.
3	EXHIBIT NO. 1085: Sample of two inch waferboard.
4	EXHIBIT NO. 1086: Sample of strands.
5	EXHIBIT NO. 1087: Sample of fines.
6	MR. CASSIDY: Q. Mr. Magee, what is the
7	species for all three of these?
8	MR. MAGEE: A. The species is aspen/
9	poplar.
10	Q. Thank you. Mr. Magee, I would like
11	to turn to your evidence commencing at page 66 on
12	woodsheds and I would like to ask you to explain to the
13	Board the concept of woodshed that you discussed in
14	your evidence?
15	MR. MAGEE: A. Yes. A woodshed is the
16	area where a mill uses or obtains its particular
17	source of roundwood. I will explain more the woodshed
18	for Grant Forest Products, the waferboard mill Grant
19	Forest Products has their waferboard mill in Englehart.
20	It is a large complex. It uses
21	approximately 850,000 cubic metres a year. It produces
22	70 per cent of Ontario's waferboard and is the largest
23	complex in the world considering it has two lines.
24	Q. How many employees work in that
25	facility?

1 A. About 280 employees.

Q. And could you describe the factors
that determine a woodshed?

A. Yes. The woodshed have many factors influencing the size of it, mainly it's limited by the the cost of the wood or what the mill can afford to pay for the wood. There are many factors, again, affecting the cost of wood, mainly transportation is the big one, geography in the woodshed itself is an important part. There may be large bodies of water.

We do have one in the Grant woodshed in the Abitibi Lake and river system where we are cutting to the south of it now. There is wood just a mile or so across, but to get at it takes a lot more travelling for the trucks conceivably, and \$3.00 or \$4.00 a tonne to be hauled, plus a little bit extra for the cutting because it is in a remote spot, more difficult to obtain access. Certainly in Thunder Bay here there is a waterbody that influences the woodshed as well.

Physical features and the geography of highways. Highway 11, the wood flows very freely along Highway 11 and the highway going from Englehart to the west is not a good highway. So wood comes north and south cheaper than it does from the the west and to the east we have the Quebec border, approximately 20 miles

1	away.
2	Q. Do market conditions impact on a
3	woodshed?
4	A. Yes, market conditions affects the
5	woodshed to the amount that when the product is selling
6	good you have a little more money to go after your more
7	expensive wood.
8	When times are tough and the mill wants
9	to still pay down its debt and keep in business, there
10	is a tendency to keep the woodshed smaller and usually
11	develop a cut that's closer in and any private wood
12	which would have been able to accumulate, but in the
13	system when times are tough generally the private wood
14	for us is closer wood.
15	Q. And are there unforeseen
16	circumstances that can change a woodshed?
17	A. Yes. Certainly for Grant, unforeseen
18	circumstances was the fire in January of this year and
19	it had to back off on some of the fire purchases just
20	because we had too much wood in the system.
21	Q. And I understand you wish to
22	demonstrate that change in woodshed by reference to a
23	map that you have.
24	MR. CASSIDY: This is a map of the area
25	of the undertaking, Madam Chair. There have been

mann f Associates Reporting Inc.

1 several maps filed previously of the area of the undertaking, but Mr. Magee is referring to drawings 2 3 that he has made on this particular map so I suggest 4 that we file this as a new exhibit which will be 5 Exhibit 108... MADAM CHAIR: 6 Eight. 7 MR. CASSIDY: Eight. Map of the area of 8 the undertaking describing Grant Forest Products 9 woodsheds. 10 ---EXHIBIT NO. 1088: Map of the area of the undertaking describing Grant 11 Forest Products woodsheds. 12 MR. CASSIDY: And perhaps you can 13 describe what the various lines mean and how that 14 relates to your earlier evidence? 15 The Grant mill is MR. MAGEE: A. Yes. 16 where the "x" is here in Englehart, Ontario. Before 17 the expansion in 1988, the original woodshed of Grant 18 was essentially the Kirkland Lake District and the 19 Latchford unit in Temagami, plus some wood from the 20 Gogama District. At the time of the expansion the wood 21 supply area was increased and the woodshed turned into 22 the orange line. 23 Since the fire in 1990 of this year, 24 January, the mill is still operating on the old line,

so the capacity has been reduced. They expect to be up

and running again with a new line by mid to late
summer. As a consequence for now, of which it has
reduced, we are not going to be aggressively searching
some of the far out wood and some of the wood that's in
the other woodshed. We will probably not take the
maximum wood we could take from them, but we will keep
them alive in second gear, so to speak, so they are
there when we need the additional wood in the fall.

Q. All right. Does that cover all the woodsheds?

A. I would like to point out that in the woodshed area there are many other users. There are about six large softwood sawmills that take wood from that area, so Grant is not the sole operator in that area by any means.

Much of Grant's wood comes from other people's cuttings and Grant, of course, cuts everything as they go and the softwood is sold or exchanged to sawmills or pulp mills. There is quite an inter-dependence on one of another.

much, some of the other softwood mills are concerned about the conifer component that we have always freed up and sold to them and they are having to make arrangements to cut a little heavier in spring in their

1	O 7.730	areas.
1	OWII	areas.

Flexibility there is not bad. We pull
from eight different Crown units, four FMAs and one
company unit and thank goodness all the plans don't
come due at the same time, so there is a bit of
flexibility in storing wood and or waiting for one
plan to come new and then we can start all over again
on it

- Q. When you say you pull from eight different areas, could you just explain to the Board what you mean by that?
- A. Pull, I guess, is the slang for received wood that has been cut in eight different Crown management units.
- Q. And just to complete your evidence, could you summarize the impact of those changes in terms of your concerns regarding that planning?

A. We feel the planning needs a great
deal of flexibility to be able to accomplish or
accommodate the mill to go through such things as this
fire or possible - which we are experiencing right now
in one unit - delay in getting work permits going.
Because of the first of the year we need the
flexibility to be able to cut on other units and
perhaps at a higher rate than we had originally

1	intended.
2	MADAM CHAIR: Excuse me, Mr. Magee. Is
3	Grant responsible for doing being involved in timber
4	management plans for those eight different units?
5	MR. MAGEE: Certainly we go to all the
6	open houses. Just recently in this new round of
7	management plans that are coming up, I am involved
8	directly in the Shining Tree unit on the not
9	specifically a member of the planning team, but invited
10	to the meeting as an advisor on the Shining Tree
11	Management Unit.
12	And I hope that as the other management
13	plans come on line and they start forming planning
14	teams, that members of our company do get a chance to
15	participate.
16	MR. CASSIDY: Thank you, Mr. Magee.
17	MADAM CHAIR: I am just a bit confused.
18	Is Grant forest a signatory to any of the four FMAs?
19	MR. MAGEE: Excuse me?
20	MADAM CHAIR: Is Grant forest a signatory
21	to any of the four FMAs?
22	MR. MAGEE: No, we receive wood from four
23	FMAs but we are not ourself an FMA company.
24	MR. MARTEL: You are primarily involved
25	in the purchasing then with the four FMAs and the eight

1	Crown units?
2	MR. MAGEE: Yes, we wish the
3	principals in the company wish they had a little more
4	secure wood supply. In round figures, Mr. Martel, a
5	third of the wood is cut by Grant and Grant's own
6	licenses, and then there is other wood quite secure
7	from the FMA, but a large amount of the wood is
8	purchased from other Crown operators.
9	MR. CASSIDY: That completes Mr. Magee's
10	evidence, Madam Chair.
11	I propose we then move on to Appendix C
12	and that is the evidence provided by Mr. Pryke and Ms.
13	Imada and that can be found at page 73 of the wood
14	supply witness statement, Exhibit 1072, and it is
15	titled: The Influence of Markets and Technology on th
16	Raw Material Requirements of the Ontario Pulp and Pape
17	Industry.
18	And I would like to begin with Mr. Pryke
19	and Mr. Pryke will have some overheads which are found
20	in the body of the witness statement.
21	Q. I would like to ask you to commence,
22	Mr. Pryke, and indicate summarize the evidence from
23	pages 74 through 81 of your evidence on the state of
24	the wood supply to Ontario's pulp and paper mills?

MR. PRYKE: A. Thank you, Mr. Cassidy.

1	I would like to start just to respond to an
2	interrogatory first which I think is No. 11 in the
3	group that you were given this morning.

MR. CASSIDY: That's page 11 of Exhibit 1073, an interrogatory filed with respect to this witness statement by the Ministry of Natural Resources, their No. 6, Madam Chair.

MADAM CHAIR: Thank you.

MR. PRYKE: Just to note, in the remarks that I will make the term wood requirements should be substituted. Where I'm talking about wood supply, I'm talking about wood requirements for the mills rather than wood supply in a broad sense.

Ontario pulp and paper mills has been increasing over the last number of years, particularly in response to world-wide demand and domestic demand to pulp and paper products. And this can be shown best in Figure 3, page 76 that Mr. Virgo is putting up on the overhead.

What it shows is the consumption growth of paper and board use in North America, western Europe and the world over the period 1960 to 1980, and you will note that in all three categories it has been increasing on a slow and steady pace. Material was presented by Mr. Duncanson I think in Panel 5 that

showed similar trends and that those trends are expected to continue certainly into the near future.

The wood requirements for Ontario mills have been responding to this and this can be shown in Figure 1 on page 75 of the evidence statement and the Board may want to direct their attention to the overhead in this case. I have made it a little bit more easy to see than the copy that you may have in front of you.

Just to show two things -- well, there is a number of things on this overhead. One is that you will see a generally increasing wood requirement to the Ontario pulp and paper mills which had a decrease in 1975 due to a labour dispute, was one of the interruptions in it, and a slow progressive increase and also in 1982 as a result of the recession.

This particular overhead shows the two components of that wood supply. One being roundwood to pulp and paper mills and the other being, in this case, sawmill residuals, chips, much similar to the ones that Mr. Atkinson showed earlier.

MR. FREIDIN: I'm sorry, which is the roundwood?

MR. PRYKE: The roundwood is the -MR. FREIDIN: Solid or...

1	MR. PRYKE: No. The roundwood is the
2	slashed one.
3	MR. FREIDIN: Thank you.
4	MR. PRYKE: I can't see it quite as well
5	from here and the solid one is the sawmill residuals.
6	I can expand a little bit better by the next slide
7	which shows the sawmill residuals.
8	If you could put the next slide up.
9	MR. MARTEL: On the figure, if I might
.0	just ask, in our book, in the exhibit, there seems to
.1	be a very dark area at the bottom portions of those, I
.2	don't know if that's accidental, but they seem to be
.3	out of whack in terms of the size of those that were on
. 4	the overhead. And I don't if that - above the dark
.5	mark put the other one back up.
.6	MR. CASSIDY: The photocopying I think is
.7	our villain there, Mr. Martel, and we will provide you
. 8	with a hard copy which shows the difference in colours
.9	which did not turn out on this one particularly well.
20	MR. MARTEL: I guess I am just asking,
21	Mr. Cassidy, if that's an error in the one in the
22	exhibit because the dark marks, the solid area for
23	roundwood, if one looks at 1966, wouldn't appear to be
24	more than half inch and then you start to see what
25	appears to be a slash of some description.

MR. PRYKE: Perhaps I can look at your 1 copy, if that's okay. 2 MR. MARTEL: Sure. 3 4 MR. PRYKE: If we look back to this one 5 here, what I have done is reproduced the same curve, same information with better visuals. It is best to 6 7 look at this one. MR. MARTEL: Ignore this one then. 8 9 MR. CASSIDY: We will have copies made of 10 this or else we are going to get a coloured copy or ... 11 MR. PRYKE: I think I was moving to the 12 next slide which just shows the increasing utilization of sawmill residuals over the last 20 years. 13 14 This is now Figure 2 on page 75 and it .15 shows this increase from about 10 per cent in 1966 to 16 close to 30 per cent by 1986 and this is mostly due to 17 the use of the kind of sawmill chips that Mr. Atkinson 18 showed in his evidence statement and is a good example 19 of using a -- what would have been a lower value product from a sawmill in the 1960s and converting it 20 21 into a much higher value product in pulp and paper, 22 particularly in this case kraft pulp. 23 In addition, one other component that is 24 important to look at is the increasing use of poplar 25 for pulp and paper in Ontario. And the next slide,

1	which is now Figure 4 on page 76, just shows that that
2	poplar has been increasingly used particularly since
3	the mid-1980s mostly for producing bleached hardwood
4	kraft pulp for the manufacture of fine paper.
5	Q. And in reference to the production
6	statistics which are contained on pages 77 through 81,
7	can you summarize those briefly for the benefit of the
8	Board?
9	A. Yes. These pages 77 through 81 are
10	more or less a breakdown of some of the figures that we
11	have shown.
12	If we start with Figure 5 on page 78 you
13	will see that the wood pulp production in Ontario has
14	followed the wood supply in very similar trends
15	starting at about 35 or sorry, 3.5-million tonnes in
16	1970 leading up to about a little over 4-million,
17	4.2-million in 1986, interrupted again as you'll see in
18	1975 by the labour dispute and in 1982 by the
19	recession.
20	Figure 6 just shows how that
21	Q. And that can be found on page 79?
22	A. Page 79 shows the different methods
23	of producing that wood pulp. You will see there is
24	four different methods that are covered in this curve.
25	Groundwood, which is the GWD, sulphite pulping process,

1 the kraft process, thermomechanical pulping. What you will note is that the kraft 2 component has been increasing over the last 15 years, 3 the sulphite process has been decreasing, as has the 4 5 groundwood process, and the TMP, thermomechanical 6 pulping process has been increasing. 7 So there is a shift in technology in 8 producing the pulps for the different pulp and paper 9 products that are produced in Ontario. MR. FREIDIN: And again, just because we 10 don't have the colours, which of the diagrams -- the 11 12 little triangles is TMP and which one is sulphite. MR. PRYKE: TMP is the one that starts on 13 14 the lower part of the curve. 15 MR. FREIDIN: Thank you. 16 MR. PRYKE: And increases as we get into 17 1982, '83, '84. MR. CASSIDY: Now, I would like to turn 18 19 to Ms. Imada and Section 4 of this evidence, Madam 20 Chair, which commences at page 82. And Ms. Imada 21 intends to give this evidence by way of slides and, as 22 a result, I would ask Mr. Dadds to kill the lights. And this evidence, Madam Chair, relates 23 24 to species characteristics and their importance in pulp 25 and paper making.

1	Q. And, Ms. Imada, I was going to
2	commence by asking you to explain the importance of
3	species characteristics. And I understand you do wish
4	to refer to some slides.
5	Before you do, can you confirm for me
6	you're a research scientist with Abitibi-Price?
7	MS. IMADA: A. Yes, that's right.
8	Q. Thank you.
9	A. Well, basically, Mr. Cassidy, wood is
LO	of biological origin and it's a highly variable
1	material, it varies both physically and chemically in
12	its properties and some of this variability can be
13	attributed to species.
4	And what I would like to do for the
15	Board's benefit is elaborate on some of the species
16	difference that we discuss in the evidence beginning on
17	page 82. If I could have the first slide.
18	MR. CASSIDY: Madam Chair, I have copies
19	of these slides that Ms. Imada will be talking about in
20	this evidence. Just bear with me, I will pass these
21	out.
22	MADAM CHAIR: Do you want to make them an
23	exhibit, Mr. Cassidy.
24	MR. CASSIDY: We might as well, Madam
25	Chair, for the purposes of the record.

1	MADAM CHAIR: Exhibit 1089.
2	MR. CASSIDY: And that would be an
3	overhead of various types of wood.
4	MS. IMADA: Sounds good.
5	EXHIBIT NO. 1089: Hard copy of slide depicting
6	various types of wood.
7	MS. IMADA: What this first overhead is
8 .	listing is a number of categories of wood, if you will,
9	and I really have it up here just to illustrate that
10	wood is wood is wood. There are a lot of differences.
11	I don't intend to discuss all of the ones
12	I have up here. What I will be going into is
13	discussing the differences between hardwoods and
14	softwoods and the species within these two categories.
15	I am sure all of you are aware, just to
16	make sure of it, hardwood and softwood does not refer
17	to the actual hardness of the wood, what we are talking
18	about, hardwoods are woods or the trees of deciduous
19	species like maple, aspen and softwood is the wood that
20	you would get from the conifers like pine or fir.
21	If I could go to the next slide. You
22	might I don't know how well you can see this. I
23	don't know if you want to go darker or not.
24	What we have here is in the top part of
25	Figure 10 on page 84 of the evidence package, and

1	what
2	Discussion off the record
3	MS. IMADA: What we have here are two
4	pieces of wood and these are softwoods. The left-hand
5	side is a piece of red pine and the one on the right is
6	a piece of white pine.
7	This top surface of what you are looking
8	at is what you would see if you looked at a disk of
9	wood at a higher magnification, so that you can
10	actually see the individual cells and that is what all
11	these holes are, those are the empty dead cells which I
12	talk about in the evidence package.
13	They are elongated cells that are
14	oriented up and down the way the tree grows and there
15	is really nothing left to them except for their cell
16	walls.
17	On this left-hand piece of red pine on
18	the top surface there is sort of two diagonal lines and
19	what those lines are doing is defining an annual ring
20	for you. So this part of the figure is really one
21	annual ring or one growth ring in a piece of wood.
22	MR. CASSIDY: Q. You are referring
23	essentially to the centre portion of the left-hand side
24	of the red pine on Figure 10?
25	MS. IMADA: A. That's right. Now,

although these are both pines then you might therefore suspect that they would probably look quite a lot alike anatomically. In actual fact most softwoods -- in fact, all softwoods have this basic structure and the fact is that 90 to 95 per cent of the volume of wood is made up of these longitudinal tracheids and there is very little else in the wood.

These tracheids in the tree serve both the purposes of conduction of water and the element of support, actually holds that tree up.

- Q. What is a tracheid?
- 12 A. A tracheid is this elongated cell in a softwood.
- 14 Q. Okay.

A. And this is the cell that we are using to make our papers from.

The one feature that will help distinguish somewhat between the different softwoods is sort of shown here if you know what you are looking for on this.

On the right-hand side the white pine, this is sort of indicative of what spruce would look like too. As we move through a growth ring which would have started here, there is sort of a gradual reduction in size of cells and they get a little bit thicker

1	wall, but there really isn't you can't really draw a
2	line that's to say when all of a sudden there is a
3	difference in what those cells look like.

again?

On the red pine however these cells are getting smaller -- you know, they are quite large and they tend to get smaller but all of a sudden there is a zone, quite a sharp zone where we have some sort of smaller cells which are quite thicker -- a thicker wall. These two sections of an annual ring are referred to often as early wood and late wood or spring wood and summer wood and the prominance of this band can have significant effects on how that wood will respond to processing.

Before I move on to show you the picture of the hardwoods, I would like to refer to some evidence that was given on day 41 of this hearing and you can find it on I think page 6923 of the transcripts.

Q. Sorry, what was that page reference

A. 6923. And the discussion was I believe cross-examination by Mr. Campbell of Mr. Duncanson, and the question was whether there were any advantages or particular advantages or disadvantages of the woods that are characteristic of the area of the

undertaking.

And what was not mentioned in the discussion is exactly what you are seeing here, the long fibers, which we have in our northern softwoods, and this very uniform gradual even texture which is characteristic of our northern spruce is a very highly valued feature for our woods and our black spruce is termed -- we refer to it as high quality wood compared to, for instance, the southern pines which are not perceived as being as high in value because of their different structure.

And the difference is that in the southern pines this late wood band, for instance, is really prominant and there is quite a bit of it and it makes for some more difficult processing.

This slide is showing the bottom half of Figure 10 on page 84. What I am showing you are three hardwoods. On the left is a yellow birch, in the centre red oak, and on the right-hand side aspen and I think when you look at this picture it becomes immediately obvious to you that we have a much more diverse structure within the softwoods and it's much more complex. When looking between the species you see all kinds of different things, certainly not the uniformity that we saw in the softwoods.

I refer to the softwoods being made up
primarily of one-cell type longitudinal tracheids.
Hardwoods however have three basic cell types, the
vessel elements which are forming these large holes or
pores that you see in all three species, and these are
the elements that are responsible for water conduction
in the trees.

The fibers, which for this yellow birch are really forming the bulk of the matrix of the rest of the wood, all these other things in here are the fibers and they are actually quite a bit smaller in diameter than the ones you were seeing for the softwoods.

Now, in hardwoods these fibers form only between let's say 55 per cent to maybe up to 75 per cent of the wood and, for instance, in aspen it's at the low end, you are only talking about 55 per cent of that volume of wood is actually elongated cells called fibers which we could use for paper -- which have value for papermaking purposes.

There is one other cell element in the hardwoods that I didn't really refer to in softwoods, although it is there, and that is the ray cells. The rays make up only about five per cent of the softwoods.

Q. Did you say ray cells?

1	A. Ray.
2	Q. Could you spell that for the benefit
3	of the reporter?
4	A. R-a-y, ray. When you look at a disk
5	of wood and you can see lines emanating out from the
6	centre out to the from the centre of the tree out
7	towards the bark those are the rays you are seeing.
8	And they run perpendicular they are
9	running this way, they are running perpendicular to the
10	growth rings. They are these lines that you are sort
11	of seeing here.
12	Q. You are referring to the lower
13	left-hand portion of Figure 10?
14	A. That's right. There are some lines
15	that are running perpendicular to the growth ring
16	inbetween the fibers and vessel elements and actually
17	you can see it on the radial surface of that side.
18	There is actually some cells that are oriented
19	perpendicular to the fibers. And they can form quite a
20	significant portion of hardwoods also and they really
21	do not contribute anything to papermaking, in fact they
22	can be a problem because of their linting and dusting
23	tendencies as the vessel elements can also be.
24	These two slides I have just shown you, I

have sort of indicated to you the basic structural

1	difference between softwoods and hardwoods. The one
2	thing which you can't see clearly here - and I will
3	show you on the next slide - is the actual difference
4	in length between these fibers or tracheids.
5	Q. All right. And if I can just
6	interrupt, I have copies of this for the Board and
7	perhaps you can explain how this relates to Figure 11,
8	Ms. Imada.
9	A. Yes. Figure 11 I have drawn the
0	various cell types, or is a drawing of the various cell
1	types we have just seen in these softwoods and
2	hardwoods, however, the length of the softwood
.3	tracheids is such that to get it on the page I had to
.4	cut it.
.5	Q. I'm sorry, Ms. Imada. Could you take
.6	that from the top again.
.7	MR. CASSIDY: And perhaps we should have
. 8	this marked as an exhibit.
.9	MADAM CHAIR: Exhibit 1090.
0	MR. CASSIDY: Q. And what would you call
21	it, Ms. Imada?
22	MS. IMADA: A. Papermaking fibers from
23	softwoods and hardwoods.
24	EXHIBIT NO. 1090: Hard copy of slide depicting papermaking fibers from hardwoods
25	and softwoods.

MS. IMADA: In Figure 11 there is a drawing which I am going to show in a minute, it's a drawing of the different cell types that I have just talked about in the softwoods and hardwoods, however because of the actual length of the softwood fibers or tracheids, to get it on to the picture in Figure 11 I had to chop them in half. So what I wanted here was to show you a scale drawing of how the two sizes of fibers relate to one another.

MR. CASSIDY: Figure 11 can be found on page 85 of the witness statement.

MS. IMADA: The long cellular element you are seeing is the longitudinal tracheids from the softwoods.

MR. CASSIDY: Q. And that is on the left of this exhibit?

MS. IMADA: A. At least the way I have the slide oriented here. It depends on how you look at the paper you have.

The shorter element is the fiber you would find in the hardwood and actually this thing is drawn to scale in terms of length and width and it might be representative of a 3.5 millimetre fiber you would obtain from pine or spruce compared to 1 to 1.2

1 millimetre fiber that you might find in poplar.

Now, this is actually Figure 11 which is

on page 85 of the evidence and it's a drawing of the

different cell types.

On the right-hand side are the softwood cell types which I have, the tracheids of papermaking fibers of the softwoods, and the small elements beside these long elements are the ray cells.

The rest of the figure illustrates hardwood fiber types. These are the fibers we were just talking about on the left-hand side of the picture -- extreme left-hand side. These large elements in the centre are the vessel elements that I talked about in terms of water conduction in the tree.

And in terms of scaling of the relative size they are very variable. You will remember from that earlier photograph of actual wood the pores were very large in diameter to very tiny in diameter and so in some instances this might be only the diameter of this, but in some instances the vessel could actually be 50 times the diameter of the fiber; lengthwise also, they would be -- they never really are any longer than a fiber but they can approach the length of the fiber and they may be as short as a quarter the length of the fiber.

And these elements -- the vessel elements and the little tiny ray cells, when you pulp the material and it can cause problems in linting which I will be talking about a little later.

1 2

I think we will just leave this one up and I am going to sit down. Now, the different cell types or in the different species we are going to see different proportions of these different cell types and the actual dimensions of those cells are going to change; dimensions like length, diameter and wall thickness, and in the evidence package Table 1 on page 86, I present some limited data with respect to these dimensions for some different species.

And, as I say, on page 83 it's these physical properties of the wood that ultimately affect its processing and the type of pulp quality you get from the different woods.

And generally hardwood pulp, no matter how you make it, will be weaker than softwood pulp and this comes as a result of the shorter fibers that we find in the hardwoods; they are of less compressible nature and the presence of these other cell types, the rays and vessels, which can be quite high in number which contribute little to the bonding strength of the wood -- of the pulp.

1	If we were to look in terms of one
2	particular group like the softwoods, generally we can
3	expect that those species which have the longer cell
4	longer fibers and the thinner walled fibers are going
5	to produce higher, stronger and better quality pulps.
6	Now, this addresses some of the physical
7	differences between the species but in our evidence I
8	also refer to chemical differences. And wood is
9	basically made up of four main chemical groups, these
10	are lignin, cellulose, hemicellulose and extractives.
11	Now, the first three are structural
12	components and those are the things that go together to
13	actually build the cell walls that form these cells
14	that you see on the screen. And while there are
15	species to species differences for these chemical
16	classes, they really aren't of a great deal
17	significance for us right now. What is really
18	important is the difference in extractives which can
19	vary quite a bit from species to species.
20	And extractives are extraneous components
21	that are found generally in the ray cells and they can
22	have a significant impact on how you are going to
23	process that species, how much pitch is going to crop
24	up in our pulp and paper mill, the actual strength of

the pulp and the colour of the pulp and its brightness

1	and	what	you	might	find	in	your	mill	effluent	for
2	inst	tance								

- Q. Ms. Imada, if I could just ask you to give the Board a page reference where they might find the discussion of the chemical properties.
 - A. 83. I can give you an example of this. In the hard pines such as jack pine there are materials in the hardwood portion of the log various phenolics and, in particular, things called pinosilvan and pinosilvan monoethylether which prevent its utilization in acid sulphite pulping.

And what you end up getting is a reaction in the pulp, the chemicals there, that form an insoluable product which will come out in your paper machines and cause a lot of operational problems and can also cause you to get some very funny colours in the pulps you produce. And generally, therefore, you definitely do not want to see any jack pine going into a process which is using acid sulphite.

The next couple of slides sort of make a further comparison of properties of, in this instance - could I have the next one - of spruce versus pine, and what it might mean for how you might process it.

MR. CASSIDY: I have a hard copy of this overhead which we could provide as Exhibit 1091, I

believe. Is that correct, Madam Chair?
MADAM CHAIR: Yes, that's correct.
MR. CASSIDY: (handed)
EXHIBIT NO. 1091: Hard copy of slide depicting property differences between
spruce and pine. MS. IMADA: On this slide I am listing
some general property differences between spruce and
pine. The first point is that spruce is much more even
in texture and by here I am referring to the early wood
and late wood differences that I mentioned quite a bit earlier.
Pine generally has a higher specific
gravity, by this I mean density to weight per unit
volume. Pine is generally higher in pitch and pitch is
a word we often use for extractive content. The
specific rapidity the higher specific rapidity of
the pine is coming from its thicker walled fibers.
MR. CASSIDY: Q. And as Ms. Imada
indicated, the specific gravity table can be found at
page 86.
A. Fiber lengthwise there isn't a
really depends on how you make your comparison. I
haven't gone into the actual instances of variability.
All these properties vary quite significantly even
within a tree and depending on how you compare you

1	might in some instances come up with that spruce is
2	longer than pine and pine is longer than spruce, but
3	actually the type of fiber that is produced at
4	maturity, so let's say 40 years, okay, will be
5	producing fibers generally of equal length in the two
6	species.
7	There are some other morphological
8	differences which relate to actually the structure of
9	the cell wall. There are multiple sort of sublayers in
.0	the walls and some people have found that the one
.1	particular wall referred to as the S1 layer happens to
. 2	be thicker in pine and there are also suggestions that
. 3	the cell wall packing density is higher in pine.
. 4	If we can move to the next slide.
.5	MR. CASSIDY: And I can provide a copy of

MR. CASSIDY: And I can provide a copy of that overhead which would be Exhibit 1092. Indications of Species Differences for Processing. (handed)

---EXHIBIT NO. 1092: Hard copy of slide depicting Indications of Species Differences for Processing.

16

17

18

19

20

21

22

23

24

25

MR. CASSIDY: Q. Go ahead.

MS. IMADA: A. What some of these wood property differences means when you process these two species is that the higher extractives we find in pine -- I mentioned extractives will affect the bondability among other things; hence, what they do is

they reduce the bonding. So you get the weaker pulp from pine just because of the presence of the extractives.

The way wood breaks apart in the mechanical pulping is that it's subjective to alternate compressive and decompressive forces, but when you have a higher specific gravity material it doesn't absorb the energy through this compression/decompression in the same way that lower specific gravity material does and it tends to break in a very brittle way and you end up getting some small fragments that really don't have any developed — that has been broken off from wood.

Those aspects that I mentioned with respect to how the cell wall is actually built up in these two species with respect to the layer -- the thickness of the S1 layer for instance affects ease of refining in that for you to be able to rip off this S1 layer you have to put a lot more energy into the process.

But ultimately what happens, you put the more energy in it still really doesn't break in a very nice mode and you don't get -- for a given type of processing you will not get the same quality from the pine as you wood from the spruce.

So to summarize, what I have tried to

illustrate is that there are some very significant physical and chemical differences between the woods, the different species and this, therefore, determines what processes you might use for those species and the types and quality of product you can get from them and, conversely, to have for a given mill and to ensure its continuing efficient profitable operation it has certain processes that it's going to require, certain species to feed it.

MR. CASSIDY: Right. I would like to turn you then to Section 5 of the witness statement at page 87, Madam Chair.

Q. And ask you how this summary you have just given of your evidence and species requirements relates to newsprint problems here in the province?

MS. IMADA: A. Well, basically as it says, as we have in the evidence package on page 88, newsprint is made traditionally from a mixture of mechanical pulps like stone groundwood or refiner pulp like thermomechanical pulp which we refer to as TMP and chemical pulps.

The bulk of the paper is made from mechanical pulp. This is generally quite weak in nature, so the chemical pulp is added as a reinforcing agent which enables the paper web to get out -- down

1	through the paper machine and off the rail at the end
2	and through the printing processes.
3	And, as Mr. Pryke alluded to in one of
4	his earlier graphs, he showed a graph showing the
5	transition moving from stone groundwood to TMP and the
6	reduction in sulphite and increasing in kraft.
7	And perhaps I can refer to an
8	interrogatory we received from Forests for Tomorrow,
9	it's Question No. 1 and it's on page 12 and 13 of
10	Exhibit 1073.
11	Q. Exhibit 1073.
12	A. And part of the question was asking:
13	How do the following items affect the wood requirements
14	of mills. And they asked about this decrease in
15	groundwood, the sulphite pulping, and the increase in
16	thermomechanical and kraft pulping.
17	And basically what it meant was, was
18	stone groundwood process require the use of roundwood,
19	the thermomechanical process does not, we use sawmill
20	residuals. And as there has been an increase in the
21	thermomechanical process relative to the sulphite
22	process we have been able to use more sawmill residuals
23	or chips ultimately.
24	The move from stone groundwood to

thermomechanical pulping has also meant that the

25

mechanical pulp we are producing is of a better strength, higher in strength. This really means that we need less of a reinforcing pulp to make the paper and reinforcing pulp has generally been of rather low yield. So if you are to replace some of the low yield pulp with the higher yield and thermomechanical pulp, ultimately when we are making a given quantity of paper we are actually using less volume of material to do so.

Now, if I can really get back to my question, Mr. Cassidy. It was realizing that we are basically using a mechanical process, the mechanical process tends to rip the fibers out of the wood and you do a lot of physical damage; hence — and you are shortening the fibers and we want long fibers, so we prefer not to put hardwood — you really cannot put hardwoods into the process because there is too much chopping, you lose too much length, so we refer to use the softwood. We need the fiber length there.

MADAM CHAIR: Excuse me, Ms. Imada. I
think we will break for lunch now, and when we come
back could we start again with page 12 on Exhibit 1073?
I missed some of your points on the different
processes.

MS. IMADA: All right.

MADAM CHAIR: Thank you very much.

Farr & Associates Reporting, Inc.

1	MR. CASSIDY: And that will be until?
2	MADAM CHAIR: 1:30.
3	MR. CASSIDY: Thank you, Madam Chair.
4	MR. LINDGREN: Madam Chair, before we do
5	break, I can advise that there are some exhibits that
6	the parties and the Board should have with them.
7	Upon our return the parties and the Board
8	will require copies of Exhibit 16, the Baskerville
9	Report, Exhibit 534A, Exhibit 108
10	MR. FREIDIN: What is 534A?
11	MR. LINDGREN: Mr. Hynard's graph.
12	Exhibit 108, Exhibit 125, Exhibit 116, and Exhibit 93.
13	I may not necessarily refer to all of
14	them, but I think that they should be made available to
15	the Board and the parties.
16	And as well I may be referring to Volume
17	165 and Volume 28 of the transcript.
18	Luncheon recess taken at 12:05 p.m.
19	On resuming at 1:30 p.m.
20	MADAM CHAIR: Please be seated.
21	MR. CASSIDY: Madam Chair, as I
	understand it, we were going to go back and ask Ms.
22	Imada to go over the evidence in respect of the
23	interrogatories filed by Forests for Tomorrow and I
24	
25	will just leave it to Ms. Imada

MS. IMADA: Madam Chair, before we broke for lunch I was talking about the pulps and the quality of wood required for the newsprint manufacturer, and in the discussion of the interrogatories from Forests for Tomorrow I was speaking specifically to their question about how the decrease in groundwood and sulphite pulping and increase in thermomechanical and kraft pulping affect the wood requirements of mills and to briefly repeat, groundwood, the stone groundwood process required groundwood; that is, solid logs.

When we move to thermomechanical pulping, we were able to use chips because the thermomechanical process uses chips. So if a company has process in place they may, in fact, buy chips by sawmill residuals or they might in fact produce their open chips in-house, too.

The other aspect of moving from stone groundwood to thermomechanical pulp is that the refiner mechanical pulp is a stronger pulp than the groundwood. And I mentioned earlier that generally newsprint is made from a mixture of mechanical pulps and some sort of reinforcing chemical pulp; hence, if we have a stronger mechanical pulp we ultimately need less of the chemical reinforcing pulp and the chemical reinforcing pulp is generally a lower yield pulp than a mechanical

pulp, so if we replace the lower yield pulp by a higher
yield pulp, then we ultimately need less raw material
to give the same given amount of paper.

The other aspect of that question is with respect to the change from sulphite to kraft and one of the important things in that is that the kraft process tolerates a wider range of species, and I spoke earlier about the inability of sulphite process -- the acid sulphite process to use pine.

And also, generally what happened with the mills that were using stone groundwood, they were often producing their own sulphite in-house and as they move to TPM they required less material and they wouldn't -- often they would shut down their sulphite mills, especially if there was a problem with respect to environment.

The sulphite had a generally high discharge and as it mentioned — in the evidence package we talk about the change in sulphite technologies and there have been a great number of changes in terms of the chemicals that had used and the process in terms of giving us higher and higher yield of sulphite pulp and that's on page 88 of the evidence package.

So if I can refer back to the type of

wood we would want in the newsprint production,
mechanical pulp is a mechanical process and you would
damage the fibers as you rip it out of the wood and you
shorten the fiber and we want long fiber to give us the
strength that we require; hence, we want to have as
long a fiber as possible going into the process and,
hence, the desire for the softwoods.

15 `

Hardwoods are not especially desirable in processes like stone groundwood or thermomechanical, refiner mechanical pulping.

Another aspect is we want those woods to be species which tend to be low in extractive content because of the influence of extractives that I mentioned earlier.

Market demand. On page 87 of our package we address some of these and one of these is the tendency to produce newsprint on the lower basis weight and this means the paper weighs less per unit area. The problem with this is that as you get thinner and thinner — what you are producing basically is thinner paper and then you then have a problem with opacity, but we still have requirements to have high opacity. Opacity refers to when you look at a sheet of paper — the importance of it is that you can't see the printing on the other

side. So when you see your newspaper you want to be reading one side and not the other; hence, we want to have species which tend to give us high opacity and spruce is one of these species.

Another aspect is brightness and colour and part of the reason this is so important is because of the printing technology that's going on, what's happening out in the marketplace. What we are seeing is a move from the traditional black and white newspaper like your everyday Globe & Mail, which I have a copy here, to the four-colour version you are seeing in the U.S.A. today and I believe Mr. Duncanson submitted a copy of U.S.A. today as a piece of evidence in Panel 5.

And what we are -- the advertisers here, who are really our customers in effect, want to have a certain colour and a certain brightness of their papers to show up what you are looking at to the best possible advantage. So we are looking for pulps which will produce a nice white and bright -- or a bright sheet and spruce -- and in fact we have done some studies, poplar is a very bright species.

The other thing I mentioned is the change in printing technologies. We have moved from the traditional -- or we are moving from the traditional

letter press process; however, a significant amount of our paper is still -- of the newsprints are still printed with letter press technology into offset processes and these processes make much higher demands on surface strength -- we would require much higher surface strength in our paper and surface strength refers to linting and dusting.

1 2

What this means is that as you print your paper -- what happens is some lose fibers would be pulled off the top of the surface and they would start to accumulate on your printing plate and then, consequently, you know, the later copies are very poor quality because the image has been blurred by all this linting and dusting.

So we want to have species that don't produce a lot of materials that will contribute to linting and dusting, and I mentioned earlier a lot of the ray cells and vessel type elements that you would find in the hardwoods actually will do that, so we try to stay away from that.

Another aspects include making a clean sheet and this means not having any dirt or shives or contaminant particles in there because what they will do is in the stresses of the paper machine or the printing press you will end up getting breaks and, of

1 course, decrease your efficiency of your operation and 2 so, hence, we want to have very little bark in our wood 3 supply, not only for the cleanliness of the sheet, but 4 also the influence it has on brightness and little rot. 5 Q. You used the word shive. 6 Shive is real -- in mechanical 7 pulping -- in a pulping process what you're trying to 8 do is separate the fibers out from the wood matrix on 9 an individual basis. In mechanical processes sometimes 10 they come out as a chunk, so you will get two to three 11 that sort of come out as a bundle together and that 12 bundle of two to three fibers is termed a shive. 13 Can you spell that? 0. 14 A. S-h-i-v-e. 15 0. Thank you. I'm not saying that we want to have a A. 16 17 hundred per cent spruce in there because certainly you can tolerate some other species, but the importance is 18 that whatever you have there has to be uniformity of 19 mix. A process isn't able to live with either working 20 on a hundred per cent spruce one day, a little of that, 21 and then moving to a hundred per cent balsam another 22

day. Whatever the species mix is we want to make sure

So ultimately what is happening is the

we have some control over the uniformity of it.

23

24

25

more stringent demands of the marketplace are asking 1 2 for higher brightness, smoother and stronger surface 3 strength sheets that have high opacity and this puts 4 limits on the types of wood that can go into the 5 pulping and paper making process. 6 Q. All right. Thank you. 7 MR. CASSIDY: I would like now to turn back now to Mr. Pryke and move on to Section 6 of 8 9 Appendix C and that can be found on page 92, Madam 10 Chair. 11 And, Mr. Pryke, I would like you to 12 summarize this evidence in terms of the wood supply 1.3 requirement and raw materials requirements for the 14 kraft pulp industry? 15 MR. PRYKE: A. Thank you, Mr. Cassidy. 16 The majority of the kraft pulp and paper produced in 17 Ontario is used to produce bleached market pulp or 18 convert it to fine paper and these markets are growing, 19 responding to the demands for printing and writing 20 papers and communication papers. Much of the paper 21 that we are using today is bleached craft or fined 22 paper that is produced from a kraft process. 23 In the fine paper production, the 24 softwoods provide much of the strength for the sheet 25 and hardwoods are preferred for their formation

properties. The raw material requirements, as Sandy mentioned -- Ms. Imada mentioned is that the kraft process is what you might say more forgiving; that is, more tolerant of species, that is you can make kraft pulp from spruce and from jack pine and from poplar and, in fact, it can be made from sawdust residuals, as Mr. Atkinson showed earlier depending on which grade you are trying to make. In this case, the sawdust and shavings would be turned into a particle liner Board which is what we use for our boxes and cartons.

Q. You are referring to the example --

A. That is Exhibit 1078, sawdust and shavings. Another important thing to remember is that the kraft pulping process is a chemical based process as opposed to a mechanical based process. In mechanical pulping we are using mechanical energy to separate the fibers and in the kraft pulping process we are using mechanical energy, so to speak, to remove the individual — to separate the individual fibers from the lignin bonding matrix.

The important characteristics for the bleached kraft producer or one of the main ones is to make sure that the wood coming into the mill that the the logs have been well debarked, that this type of material has been removed from the wood. This is

1	Exhibit	No.	1079.
---	---------	-----	-------

Q. You are referring to the sample of

bark?

A. Sample of bark, yes. And the main reason why we want -- there's a couple of reasons why we want to minimize that content. One is that that material is extremely difficult to bleach. If it's in the bleaching process, what you will end up with is a sheet contamination or specks on the sheet.

Another reason is, particularly for poplar, is it is rather high in extractive content, as I might have talked about extractives earlier, and extractives can during the bleaching process become pitch particles which can adhere to equipment in the mill and ultimately break off and contaminant the sheet much in the same way as bark would, so we try to minimize the bark content of poplar also.

Species is important in the respect that we separate hardwoods from softwoods, is about as a good generic as we need to get. The pulping and bleaching characteristics of hardwoods and softwoods are quit different.

Hardwoods are easier to pulp; that is, they require somewhat less chemical requirement to remove the lignin -- to separate the lignin and

cellulose fibers and they are somewhat easier to
bleach; that is, they require less of bleaching
chemicals to produce the same brightness. If we are
going to have a process we would want to pulp and
bleach hardwoods and softwoods separately.

Another important characteristic is the size distribution. As Mr. Atkinson mentioned, these chips are screened and they're screened to particular size dimensions, principally these days on thickness of the chip.

Q. Which sample are you referring to?

A. This is Exhibit No. 1077, pulp chips. What's important is to have the chips be of a range of thicknesses appropriate to the chemical pulping vessel that the mill may have.

In the case of a softwood bleached kraft pulp mill producing products for paper, you would want chips of a thickness of about six millimeters, it would be ideal. In addition, you want to have minimum bark content. When you look at this bag you will note that it's quite clean, there is very little bark content in it and also a minimum amount of charcoal or burnt wood also because it's difficult to bleach and would also contaminant the pulp sheet.

The other important thing is that you

will also notice that there is very little of the sawdust called savings or pin chips in the bag of screen chips, and the reasons are that when you are producing a paper grade pulp this material can clog up circulating screens inside of a digester, for example, and disrupt the quality of the cooking and also perhaps the production process.

So those are some of the ways in which the raw material is specified from the pulp mill to the sawmill and they produce it for the pulp mills.

Q. Now, we can move on to Section 7
then, Mr. Pryke, and just briefly finish the evidence
with respect to some statistics on recycling and I
understand you also wish to refer to an interrogatory
which was provided in this matter --

A. Yes.

Q. --asked in this matter by the Ministry of the Environment.

A. Yes, Mr. Cassidy. Recycled paper production is an important part of the total paper produced in Ontario.

The utilization of waste paper has been increasing over the last number of years and Mr. Virgo has -- this is from page 97 of the transcript -- or the evidence, Figure 16, just to show that the waste paper

used in Ontario and converted into paper and board

products has been increasing from about 600,000 tonnes

in 1980 to I think 941,000 tonnes in 1988. That waste

paper come from a number of sources which is shown in

Figure 17, page 98 of the evidence statement.

Following on with containers, which would

be our cardboard boxes, waste newsprint, de-inking

be our cardboard boxes, waste newsprint, de-inking refers to mixed papers from -- ledger papers similar to what we are working with and some other sources. And you will note that the total production is about, again, 940,000 tonnes of which approximately 400,000 tonnes was imported in 1988 into Ontario and it's expected that with the blue box type programs that that amount of imported material will decrease.

These products were converted into a number of other products and this is where I will answer the interrogatory from the Ministry of the Environment.

MR. CASSIDY: That is interrogatory No. 9 from the Ministry of Environment, Madam Chair, which is found at page 14 of Exhibit 1073.

MR. PRYKE: That 940,000 tonnes of waste paper that was collected was converted; 42 per cent of it was converted into new containers, 3.4 per cent into fine papers like we are using, 32 per cent into box

1	boards and that's the kind of cartons we get our cereal
2	in.
3	It is much thinner than a cardboard box
4	type sheet and 19 per cent approximately 19 per cent
5	into newsprint and a smaller fraction, 3 per cent, into
6	other paper and boards.
7	Q. All right. Thank you.
8	MR. CASSIDY: Madam Chair, before I
9	finish, I now have a better copy of the Figure 1 that
10	Mr. Pryke was referring to earlier in the day and
11	Figure 1 can be found at page 75 of Appendix C. This
12	copy has the benefit of a light touch and photocopier
13	which shows up the figures better.
14	The overhead was an attempt to correct it
15	by way of overhead, but the production of the overhead
16	result in some errors in the graph, so I would suggest
17	that we make this an exhibit and simply label it Clear
18	Version of Figure 1 in Exhibit 1072.
19	MADAM CHAIR: That's Exhibit 1093 and you
20	want it to replace Figure 1 on page 75 of Exhibit 1072?
21	MR. CASSIDY: That's correct.
22	
23	EXHIBIT NO. 1093: Replacement of Figure 1 on page
24	75 of Exhibit 1072.
25	MR. CASSIDY: I have no further

1	questions, Madam Chair.
2	MADAM CHAIR: Thank you, Mr. Cassidy.
3	Mr. Lindgren, are you ready to proceed?
4	MR. LINDGREN: Yes, I am, Madam Chair.
5	Could I have a moment to set up, please.
6	I believe I have everything I require,
7	Madam Chair. I would like to start by filing a package
8	of Forests for Tomorrow interrogatories, two of which
9	appear in Mr. Cassidy's package but I want to file the
10	entire package at this time.
11	MADAM CHAIR: That's Exhibit 1094.
12	Mr. Lindgren, would you like to describe
13	the interrogatories.
14	MR. LINDGREN: Yes. Actually it's a
15	complete interrogatory package, questions 1 through 9
16	from Forests for Tomorrow with respect to panel 3.
17	EXHIBIT NO. 1094: FFT interrogatory question Nos.
18	1-9 (ranel 3).
19	CROSS-EXAMINATION BY MR. LINDGREN:
20	Q. Mr. Saltarelli, I believe my first
21	question or line of questioning will be for you, sir.
22	Could I ask you to turn to page 30 of the witness
23	statement.
24	MR. SALTARELLI: A. Yes.
25	Q. You referred to the paragraph that's

1	written in bold this morning, the paragraph basically
2	indicates:
3	"Given the variability and fluctuation of
4	both short and long-term operational
5	circumstances and mill requirements, it
6	is critical that Industry timber managers
7	have a broad range of cost effective wood
8	supply management planning and
9	operations alternatives available to
.0	use within a framework of sound overall
.1	timber management planning."
2	I have a couple of questions about that,
.3	sir. When you referred to a 'framework of sound
4	overall timber management planning', I take it that you
.5	must mean a framework of environmentally sound timber
.6	management planning; is that correct, sir?
.7	A. That is correct.
8	Q. And just above that line you referred
.9	to 'the broad range of cost effective wood supply
0	management planning and operations alternatives' that
1	are necessary, again I am somewhat puzzled by the sole
2	use of the word or the adjective cost effective.
3	What did you mean by that?
4	A. I helieve I snoke to the need for the

industry to respond to markets and technologies and so

25

1	on. And what cost effective meant and means in that
2	context is the need for the Industry to remain
3	competitive, at the same time responding to these
4	situations.
5	Q. And that is why Industry requires a
6	broad range of alternatives?
7	A. That is correct.
8	Q. I think that aside from the issue of
9	cost effectiveness you would agree with me that it
.0	would also be an environmental limit on that broad
.1	range of alternative; is that correct?
.2	A. How do you define environment?
.3	Q. Well, for example, you would use it
.4	as defined in this proceeding.
.5	A. Are you speaking to the
.6	socio-economic environment?
.7	Q. Socio-economic environment, the
. 8	natural environment, the man-made environment?
19	A. Would you rephrase your question,
20	please?
21	Q. You've spoken of a broad range of
22	cost effective alternatives and I am suggesting to you,
23	sir, that aside from the issue of cost effective there
24	will also be an environmental constraint or limit on
25	that broad range. Would you agree with that

1	proposition?
2	A. We would agree that we plan in an
3	environmentally sound manner, so the answer to your
4	question in that context is yes.
5	Q. Perhaps I can just clarify what I
6	meant. I think that you would agree with me that in
7	some circumstances there will be situations where a
8	particular alternative or option would be cost
9	effective, but for one environmental reason or another
10	that particular option should not be carried out.
11	Would you agree with that as a general
12	proposition?
13	A. I can't offhand conceive of a
14	situation. Could you give me an example?
15	Q. Well, the example that I have in mind
16	is the option of cutting within an area of concern that
17	has been created by the the fish habitat or Moose
18	Habitat Guideline.
19	Now, it may be cost effective to cut
20	within an AOC because it is high quality wood and it is
21	closer to the mill, but for biological reasons it may
22	not be prudent to cut, and that is the example that I
23	had in mind.
24	A. In that respect, I would agree with
25	you.

1	Q. Okay, thank you. So the point that I
2	am simply trying to establish here, sir, is that cost
3	effectiveness cannot be the sole criteria in deciding
4	what range of options or alternatives are available?
5	A. Yes, I would agree you.
6	Q. Okay, thank you. One of those
7	limiting environmental or biological factors will be
8	the potential maximum amount of wood that may be
9	harvested from a management unit on a sustained yield
.0	basis. Would you agree with that proposition?
.1	A. I don't understand your question, I'm
.2	sorry.
.3	Q. Okay. I will try to cast these in
. 4	the general terms. The question is: Would you agree
.5	with me that a management unit does have a maximum
.6	amount of wood that could be harvested within a
.7	specific period if you wanted to practise sustained
.8	yield management?
.9	A. That maximum could vary according to
20	the system silvicultural systems applied; in other
21	words, it could be a maximum based upon managing for
22	natural regeneration over a long period of time, it can
23	be a larger maximum based on artificial regeneration,
24	very intensive, over a long period of time but there
5	would be some range of maximums, yes.

1	Q. In order to harvest or manage on a
2	sustained yield basis, Industry must harvest within
3	that maximum capability; is that correct?
4	A. Over an extended period of time, yes.
5	Q. In other words, if you exceed that
6	maximum; that is, if you harvest more than what is
7	growing or what can grow back, then you are not
8	practising stand yield management; are you?
9	A. Could you give me your definition of
10	sustained yield now? I look at sustained yield over an
11	extended period of time; in other words, that doesn't
12	necessarily mean an even flow. It means sustained
13	Q. I take it, sir, that you are familiar
14	with Section 6 the Crown Timber Act?
15	A. I don't know it verbatim.
16	Q. Did you know the definition of
17	sustained yield that we find in that provision?
18	A. Would you read it to me, please?
19	Q. The expression sustained yield means
20	the growth of timber than can be cut to achieve a
21	continuous or approximate balance between growth of
22	timber and timber cut. Do you agree with that
23	definition of sustained yield?
24	A. Yes, I do.
25	Q. Does that say that you cut what

1	grows?	
2		A. Yes, it does, but I believe it's
3	worded in the	context of over an extended period of
4	time. For exa	ample, if you take a very rapid situation
5	where you have	e got a very small land base, say the size
6	of this room,	this room is capable of producing,
7	whatever, 200	cubic metres of wood, but you only cut it
8	once every hur	ndred years, that's sustained yield. You
9	take what the	forest is capable of growing in that time
.0	frame.	
.1		Q. If I understand you correctly then,
.2	sir, you're te	elling me that harvest can or should
. 3	exceed the amo	ount of annual growth?
.4		A. I didn't say that, no.
.5		Q. Would you agree with that
.6	proposition?	
.7		A. Harvest should exceed the annual
. 8	growth?	
.9		Q. Can if you are practising
20	sustained yiel	ld management, can harvest exceed the
21	amount of annu	ual growth on a given geographic unit?
22		A. Okay. And do you mean annual growth
23	in a given yea	ar or annual growth over a rotation, or
24	average?	
25		Q. In a given year?

1	A. Yes, it can exceed.
2	Q. Then I take it that you disagree with
3	the recommendation that was made by the Ontario Royal
4	Commission on Forestry, the Kennedy Report. Are you
5	familiar with that report, sir?
6	A. 1947.
7	Q. That's correct. Let me read one
8	recommendation from that report. This is
9	recommendation No. 11, this is found in Exhibit 108.
.0	MR. CASSIDY: If the witness could just
.1	have time to pull that. I think he has a copy in front
.2	of him. Recommendation 11?
.3	MR. LINDGREN: That's correct. Exhibit
. 4	108 is an extract from the 1947 report and at page 183
.5	we find Recommendation 11.
.6	MR. SALTARELLI: Yes, I have that.
.7	MR. LINDGREN: Q. Okay. And in the
. 8	third sentence the recommendation reads as follows:
.9	"On the other hand, an operator must not
20	cut more than the annual growth on his
21	limits."
22	MR. SALTARELLI: A. That's what it says
23	and if it means that the operator should not cut the
24	actual annual growth on his limits, I very much
25	disagree with the statement.

1	Q. And is that the industry position as
2	well? Is that your personal position or position of
3	the industry?
4	A. That is the position of the industry.
5	Q. Thank you. Can I just attempt to
6	summarize what I think you have said a few moments ago.
7	I think that you agreed with me that there is I
8	think you agreed that the capability of the land to
9	produce a sustained level of timber, that capability
10	should limit the amount of harvest that comes off that
11	management unit?
12	A. Generally, yes, given that we are
13	talking about sustained yield over an extended period
14	of time.
15	Q. And I think that you would describe
16	that as an environmental or biological limit on wood
17	supply; is that correct?
18	A. Biological, yes.
19	Q. And that is a factor that is separate
20	and distinct from the issue of cost effectiveness?
21	A. I am not I didn't say that. I am
22	not sure I agree with that statement.
23	Q. That is my question. You agree or
24	disagree with that statement?
25	A. That the biological limit is separate

1	from cost effectiveness?
2	Q. That's a different consideration; is
3	it not?
4	A. No, cost effectiveness is influenced
5	by biological realities. In other words, stands that
6	are over heavily stocked grow faster or produce wood at
7	a faster rate, will have some impact on economic
8	considerations. So they are related.
9	Q. I didn't say that they are not
10	related, I said that they are different. And I think
11	you would agree with that proposition?
12	A. Given yes, Mr. Lindgren, given
13	that you are talking about economics on one hand and
14	biology on the other, they are two separate
15	disciplines, yes.
16	Q. I will get back to the
17	inter-relationship in a moment. Speaking generally
18	about this witness statement, it appears to contain a
19	fairly healthy outlook for the future of most mills in
20	Ontario; would you agree with that generalization?
21	I think there is an indication that there
22	is a demand that is increasing and the mills
23	themselves, the mill output is increasing or the mills
24	at least hope to increase in the future?
25	A. Well, I would think that question

1	would be better posed to Mr. Pryke since that his
2	evidence, or I believe that is the evidence you are
3	referring to. I don't know if that is his evidence.
4	Perhaps you should speak to him.
5	Q. Mr. Pryke?
6	MR. PRYKE: A. Excuse me?
7	Q. Just for your benefit, I will repeat
8	the question.
9	A. Thank you.
.0	Q. My question was: Many mills in
.1	Ontario appear to be expanding over the last few years
.2	and I believe your prognosis is that they will continue
.3	to expand in the foreseeable future.
. 4	A. Subject to some ultimate limit, you
.5	know, the demand is there.
.6	Q. Does this constant expansion mean
.7	that mills will need to harvest more wood?
.8	A. Depending on the process, yes.
.9	Q. Can you give me some examples of what
20	you mean by 'depending on the process'?
21	A. Well, I think Ms. Imada mentioned
22	that if you are going from say a ground for a
13	newsprint mill going groundwood that has a groundwood
24	sulphite kraft mix for example to produce a certain
25	amount of product, and shifting into a TMP type basis

1	you can produce the same amount of paper for less wood
2	is one example of where less wood can produce more
3	product, is one way to say it.
4	For kraft mills we have you would
5	require more raw material to expand.
6	Q. Now both you and Ms. Imada gave
7	evidence on the increasing use of poplar and wood chips
8	or wood residue in the pulp industry, but the fact of
9	the matter is the area that is harvested in Ontario is
10	increasing each year; isn't it?
11	A. I can't comment on the area question
12	myself.
13	Q. Is there anybody on this wood supply
14	panel that can answer that question?
15	MR. SALTARELLI: A. Could you rephrase
16	it? What area is increasing, Mr. Lindgren? I am
17	sorry, I didn't understand your question.
18	Q. Mr. Saltarelli, do you have a copy of
19	Exhibit 534A before you?
20	A. Yes, I do.
21	Q. And can you confirm for me that this
22	exhibit which was filed by the Ministry seems to
23	suggest that with the exception of a small dip in the
24	early 80s the total area harvested appears to be in the
25	200,000 hectare range and in fact there does seem to be

1	a bit of an increase towards the end of the 80s; is
2	that correct?
3	A. That is what this exhibit indicates,
4	yes.
5	Q. Are you aware of what the total area
6	harvested was last year, 88-89?
7	A. No, sir, I am not.
8	MR. CASSIDY: Just for the assistance, I
9	think there was evidence from the Ministry of Natural
.0	Resources in their Panel 6 on that in terms of the area
.1	of the productive forest base harvested, Madam Chair.
.2	I don't have the page reference but it wasn't part of
13	our case, but I think that evidence is already before
14	the Board.
15	MR. LINDGREN: Q. Would you be in a
16	position, Mr. Saltarelli, to agree or disagree with me
17	if I suggested to you that the amount harvested last
18	year was something in the order of 240,000 hectares?
19	MR. SALTARELLI: A. I could neither
30	agree or disagree, Mr. Lindgren. I don't know the
21	number.
22	Q. Okay. Let's confine ourselves then
23	to the evidence that is before us and that is Exhibit
24	534. Now, would you agree with me that in light of
25	this evidence it does appear that industry is

1	harvesting an area in excess or approximately 200,000
2	hectares per year; is that correct?
3	A. It would appear that that is what
4	this exhibit indicates, yes, sir.
5	Q. Well, do you have any evidence to
6	suggest it's more or less than that amount?
7	A. No, I do not.
8	Q. Now, a moment ago when we were
9	discussing biological limits I think you agreed with me
.0	that there was a biological or environmental limit as
.1	to how much wood Ontario's management units can
.2	produce.
.3	A. Yes. I qualified that by saying that
. 4	biological limit is a range of maximum's depending on
.5	the treatment regime one chooses.
.6	Q. Well, let's just pick up on the idea
.7	of the range of limit and let me ask you this crucial
. 8	wood supply question then, Mr. Saltarelli.
.9	Can you advise me at what point will mill
20	expansion and increased harvesting stop, at what point
21	will we reach that range of maximum or that maximum
22	amount of timber that can be produced on a sustained
23	yield basis in this province?
24	A. Well, it's industry's position that
25	we have a constant supply of raw material available to

1	industry. It's also our position that we stay in
2	business forever. I would say that industry would stop
3	expanding when the wood supply either existing or
4	potential is no longer sufficient to sustain industry.
5	I am not saying that industry is going to
6	expand to the actual maximum because I don't know what
7	is going to happen, but if you are looking for an
8	absolute ceiling, that would be it, that would be the
9	physical barrier.
10	Q. Does industry know at this point what
11	that maximum ceiling might be?
12	A. I think it would be imprudent to
13	speculate at this stage since the MNR has gone into a
14	very long study into the forest or timber production
15	policy. We would be second guessing the outcome of
16	that particular study and we would wait for that study
17	in order to make some sort of judgment.

18

19

20

21

22

23

24

25

Q. I think we will be addressing the new forest production policy in a moment, but I would like to return to this idea of sustained yield and what the industry sees as the objective of this undertaking.

Now, at paragraph 1 of the executive summary for your witness statement there is an indication that it is the industry's position that ensuring a predictable and --

1	MR. FREIDIN: Can you slow down for a bit
2	until I get the page.
3	MR. LINDGREN: Page 2 of the witness
4	statement, paragraph 1.
5	MR. SALTARELLI: Yes, I have got it.
6	Thank you.
7	MR. LINDGREN: Q. It is the position of
8	the industry that ensuring a predictable and continuous
9	current and future supply of quality raw material to
10	the industry's mills is the fundamental objective of
11	proper timber management in the area of the
12	undertaking.
13	Now, first of all, is the industry
14	presenting that as the objective of this undertaking?
15	A. Industry
16	MR. CASSIDY: Perhaps I can speak on
17	behalf of the Industry. If Mr. Saltarelli wants to
18	answer
19	MR. SALTARELLI: Please do.
20	MR. CASSIDY: In giving the overall,
21	Madam Chair, in terms of the industry restating the
22	objective of the undertaking, as it has already been
23	indicated by the Board, a party can't do that in terms
24	of restating the objective or even apply to the Board
25	to do that and; therefore, industry's position is that

1	this represents its position on future wood supply, but
2	in terms of the legal definition of the objective of
3	the undertaking, the industry is not attempting to
4	recast or restate the objective stated by the Ministry.
5	I take objective to mean, as I think Mr.
6	Lindgren is using it, being the purpose of the
7	undertaking. So, therefore, we would not do something
8	that the Board says cannot be done.
9	MR. LINDGREN: Madam Chair, my interest
10	is simply this: Whatever Mr. Cassidy calls this, it's
11	restated differently than the objective that we see
12	presented by the Ministry and I am somewhat unclear as
13	to why that is the case and I am also unclear as to
14	what is meant by this statement of purpose or statement

of objective and that is what I would like some

clarification from Mr. Saltarelli about.

15

16

17

18

19

20

21

22

23

24

25

I am not asking if he is offering this as a substitute legally for the stated objective of the undertaking, I just would like some clarification as to what is meant because there is a substantial difference in the definition of the undertaking here as opposed to what we have seen from the Ministry.

Q. And with that in mind, Mr. Saltarelli, first of all: Can you advise me what you mean by a predictable and continuous current and future

supply of quality raw material	1	supply	of	quality	raw	material'
--------------------------------	---	--------	----	---------	-----	-----------

2 MR. SALTARELLI: A. Very well, it's a 3

fair enough question.

4

5

6

7

8

9

10

1.1

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. I hope all my questions are fair, sir.

> A. Yes, they are, so far. I was just commenting to the Board that I have no objection to answering your question.

The current supply of raw material actually is the forest that is out there and it relates to our ability to manage that forest, our accessibility to that forest and that fiber resource. It also relates to the flexibility, if I may use that word, required by the industry to access that resource and use it.

The future supply of course has to do with the new forest, how we manage the old forest in such a manner that a new forest is available to us in the future. We set no time limit on that, that as far as we are concerned is forever. And given that we made that statement in the context of wood supply, I think it's quite an appropriate statement, like that is our main concern in the context of wood supply, to ensure that even flow of fiber.

> Q. And in light of your answer, sir, can

1	you advise me: What is the maximum amount of wood that
2	is available now and that will be available in future
3	to fulfill industry's needs?
4	A. Do you want a number?
5	Q. Do you have a number?
6	A. No, sir, I do not.
7	Q. Is the industry in a position to
8	derive a number?
9	A. I don't know. I know that I could
.0	give you a rough estimate of 20.5-million cubic metres
.1	that was cut last year roughly and that to me would
.2	seem to be the number that industry needs at the
.3	present moment given present market conditions.
. 4	But I don't know what it's going to be
.5	next year because markets will change; I don't know
.6	what it's going to be 10 years from now because I don't
.7	know what industry's plans are on a general level.
. 8	Q. Well, your answer refers to changing
.9	markets and changing needs. I think the question
20	pertained more to what we have already agreed could be
21	considered the biological or environmental limits on
22	the maximum amount of wood that could be taken on a
23	sustained yield basis?
24	A. And we expect the timber production
25	policy will address that.

1	Q. Well, let me ask you this then, sir:
2	Would you agree with me until the biological or
3	environmental limit is known to the province; that is,
4	determined at the management unit level and aggregated
5	upwards, until that's done it's likely that industry
6	will continue to expand the mills, take ever increasing
7	amounts of wood and not really know what the ultimate
8	limit is?
9	A. No, I wouldn't agree with that.
10	Q. You don't agree with that?
11	A. No. Industry may not expand, it may
12	contract, it depends on where markets are, what the
13	realities of the situation are. So industry is not
14	going to continue to expand in isolation, it's going to
15	expand in certain locations in response to what is
16	available to it in terms of raw timber or raw material.
17	It's going to expand in terms of what is available as
18	far as markets.
19	If the timber isn't there, and if it's
20	not going to be there long enough to rationalize a
21	major expenditure, then industry is not going to react
22	to it.
23	Q. I am not sure what you mean by
24	industry won't react to it?
25	A Industry will not expand won't react

1	to a situation that does not indicate that there is a
2	sizeable supply of raw material available in the
3	future.
4	Q. I think that a few moments ago you
5	indicated that industry is not currently in a position
6	to determine the current maximum amount that is
7	available and you don't know what the future supply
8	would be?
9	A. You asked for a number. I haven't
10	got a number. I can tell you from general observation
11	that there does not seem to be a problem of wood
12	supply, no alarm bells have started to ring yet, we
13	have some general localized problem areas cropping up I
14	understand and other areas that are surfacing.
15	What I am saying is we are not so close
16	to the wire now that we have to really carefully
17	consider what you are talking about; in other words,
18	expanding in the sense of expanding on a provincial
19	basis.
20	Q. I take it then you must be aware that
21	Dr. Baskerville attended before the Board and gave
22	testimony last December?
23	A. Yes, I am.
24	Q. Do you have Volume 165 of the
25	transcript in front of you?

1	A. Yes, sir.
2	Q. I am referring to page 29287 where
3	Dr. Baskerville was cross-examined by Ms. Swenarchuk.
4	A. Yes, I have it.
5	Q. At the bottom of that page, page
6	29287, Ms. Swenarchuk begins by referring to the cap on
7	mills that was enacted in New Brunswick while Dean
8	Baskerville was the Assistant Department Minister. Do
9	you have that page location?
10	A. Yes, I do.
11	Q. Then at the top of the next page Ms.
12	Swenarchuk asks:
13	"And you described it", it being the
14	cap on mills:
15	"as the first and most crucial step
16	to sustainable development in New
17	Brunswick and I wonder if you have an
18	opinion as to what would be the crucial
19	step to sustainable development in
20	forestry in Ontario?"
21	The answer that Dr. Baskerville provides
22	is:
23	"I would say that the first step would be
24	to get a reasonable credible forecast by
25	management units for the Crown land and

1	by whatever means for the non-industrial
2	freehold land of the production
3	possibilities."
4	And then he goes on to discuss what
5	happens in New Brunswick. but with respect to the
6	first part of his answer, does industry agree or
7	disagree with Dean Baskerville's assessment of the
8	crucial first step here in Ontario?
9	MADAM CHAIR: Could you repeat that first
10	step, Mr. Lindgren?
11	MR. LINDGREN: Pardon me?
12	MADAM CHAIR: Could you repeat the first
13	step that Dr. Baskerville mentioned.
14	MR. LINDGREN: The answer indicates that:
15	"I would say that the first step would be
16	to get a reasonable credible forecast by
17	management unit for the Crown land and by
18	whatever means for the non-industrial
19	freehold land of the production
20	possibilities."
21	Q. Does industry agree or disagree with
22	that part of that statement?
23	MR. SALTARELLI: A. I agree with that
24	statement.
25	Q. Okay, thank you. And then onto the

1	next page at	the top, at page 29289 Dean Baskerville
2	returns to th	e Ontario situation. He indicates:
3		"The thing that is missing here is
4		a biologically credible forecast
5		built from the forest level back up of
6		what the production possibilities are to
7		determine whether or not 'steady as she
8		goes' will in fact be sustainable."
9		Do you agree with that assessment, sir?
10		A. I agree with that statement, yes, and
.1	I think this	is one I know it's one of the
12	objectives of	the New Brunswick timber production
.3	policy to do	just that.
4		Q. And then just to finish with Dr.
.5	Baskerville h	ere on this point. At the bottom of the
16	page Ms. Swen	archuk asks:
.7		"And would I be correct in assuming that
18		absent that forecast you are not in a
.9		position to suggest whether a cap similar
20		to the one used in New Brunswick would
21		be at this time required in Ontario?"
22		And Dean Baskerville says:
23		"That's correct."
24		Does industry agree with that position as
25	well?	

1	A. Well, it's difficult for me to second
2	guess how Dr. Baskerville interpreted that question,
3	but I will tell you how I interpret that question and;
4	that is, I believe that Ms. Swenarchuk was asking Dr.
5	Baskerville if he felt that the situations in the two
6	provinces were similar; in other words, to apply a
7	similar cap in one jurisdiction as it was applied in
8	another one.
9	And I would say to that question that the
10	two jurisdictions are not in any way similar; New
11	Brunswick has a wood supply problem provincially, it's

13

14

15

16

17

18

19

20

21

22

23

24

25

Q. That's right. And the reason why you can't in Dr. Baskerville's view is that there is not a Biologically credible forecast of what is out there and what can be grown and until that is known we don't know if we need a cap but, more importantly, we don't know if that biological limit that we have referred to earlier has been exceeded or would be exceeded by the current levels of harvesting.

identified, there is a real age class gap between young

and old and New Brunswick has come to terms with that

in various ways. Dr. Baskerville is not saying that

that situation can be applied to Ontario.

1	industry that the cap is totally unwarranted. And,
2	again, I refer back to the objects of the timber
3	production policy which will attempt to enumerate that
4	biological potential across the province.
5	Q. Okay. Perhaps you can return to page
6	30 of the witness statement.
7	A. Yes, I have it.
8	Q. And again I would just like to
9	summarize it, if I could. Basically, as I understand
10	this section, you are indicating that because of the
11	various operational or economic or technological
12	changes that cannot be anticipated by industry the
13	planning and amendment process should be flexible
14	enough to allow industry to respond in a timely manner.
.5	Is that a fair summary of your evidence, sir?
16	A. Yes, sir.
17	Q. Can you please explain to me why most
18	of these changes cannot be accommodated within the
.9	existing five-year planning process or the planning
20	framework?
21	My concern, sir, is that surely most of
22	these technological or economic changes or developments
23	do not occur overnight, to some degree they can be
2.4	anticipated or forecast. I am wondering why they can't

be accommodated within the existing framework?

25

1	A. You are speaking directly to
2	technological changes in processes, manufacturing?
3	Q. Technological or economic.
4	A. Okay. We filed for example MOE's
5	Interrogatory No. 2 to answer that very question, we
6	filed NAN's Interrogatory No. 1 which spoke to that
7	question, we filed MNR's Interrogatory No. 2, again
8	with respect to that question, and there is a degree of
9	relevance that I will leave to MNR's No. 1.
10	If the Board would like me to go over
11	those I would do that for you, but I feel I have
12	already gone through that in direct.
13	MR. CASSIDY: Those interrogatories can
14	be found in Panel 3.
15	MR. LINDGREN: Q. Well, Mr. Saltarelli,
16	I take it that in preparation for this evidence that
17	you must have reviewed the Panel 3 and Panel 4 evidence
18	of the Ministry?
19	MR. SALTARELLI: A. I read the
20	transcripts as they became available, yes.
21	Q. So you have read the transcripts?
22	A. Yes, I have.
23	Q. And do you have a copy of Volume 28
24	before you?
25	A. Yes, sir.

1	Q. And at page 3275 the question that I
2	put to you or a similar
3	A. 28? There is no 3275 in 28.
4	Q. Sorry, my fluency with the Roman
5	numerals is a little bit suspect. It's actually No.
6	18.
7	A. I don't have that up here, sir. I am
8	sorry.
9	MR. CASSIDY: The best thing that Mr.
10	Campbell ever did when he asked that the numbers be
11	changed, Madam Chair. I don't even know if I have got
12	the right that's 18.
13	MR. LINDGREN: That is 18.
14	MR. SALTARELLI: That's XVIII, three
15	thousand two hundred and?
16	MR. LINDGREN: Q. That's correct. It's
17	page 3275.
18	MR. SALTARELLI: A. 75. Yes, Mr.
19	Lindgren, I have that page now.
20	Q. Okay. And the question that is very
21	similar to the one that I just put to you was put by
22	Mr. Freidin to Dr. Osborn in the middle of the page
23	commencing on line 8. The question is:
24	"And, Dr. Osborn, is there anything that
25	you are aware of in the timber management

1		planning process which in part responds
2		to the uncertainty of the future and
3		predictions you can make about the
4		future?"
5		Dr. Osborn says:
6		"Yes. In the first set of diagrams some
7		method was made to indicate that in the
8		time scale we had a series of planning
9		horizons and we described that there was
10		a 20-year short-term horizon and within
11		that 20-year time horizon there was a
12		first five-year special time horizon and
13		the reason for that was literally to
14		answer this type of question knowing that
15		technology moves so quickly, knowing that
16		what might seem ideal for today may
17		change one, two, three, four, five, 10
18		years down the road. The relook at what
19		should be my ideal is done on a five-year
20		cycle."
21		Now, I interpret Dr. Osborn as saying
22	that the curr	ent planning process is adequate to
23	address these	various changes. I think that your
24	evidence is s	omewhat inconsistent with Dr. Osborn.
25		A. May I see the diagram he's referring

Ţ	to.
2	Q. I don't know what particular exhibit
3	he's referring to, you can perhaps check at the break.
4	But the thrust of the answer indicates that Dr. Osborn
5	believes that the current planning process is adequate
6	to deal with these technological or economic changes.
7	Your evidence this morning suggests that
8	it's not and that it needs to be somewhat more
9	flexible, and I'm wondering how you can are you
10	disagreeing or agreeing with Dr. Osborn, first of all?
11	MR. CASSIDY: What I suggest we do, madam
12	Chair, is take advantage of the break. The witness is
13	indicating he wishes to refer to an exhibit. As I
14	recall having been here, Dr. Osborn wasn't looking at
15	in discussion, it may or may not be material, but in
16	fairness to the witness we should allow him the
17	opportunity to do that.
18	We can pull that exhibit, if Mr. Lindgren
19	can provide us with the number, and then if Mr.
20	Lindgren can move on, we can come back to that after
21	the witness has had a chance to review that exhibit.
22	MR. LINDGREN: Very well, I can undertake
23	to do that.
24	MR. SALTARELLI: Thank you.
25	MR. LINDGREN: Q. While we are on the

1	subject of flexibility in the timber management
2	planning process, can I ask you to turn to page 33,
3	please.
4	MR. SALTARELLI: A. This is of the
5	witness statement?
6	Q. Of the witness statement. Page 33 of
7	the witness statement.
8	A. Yes, Mr. Lindgren, I am there.
9	Q. Now, again, if I could just summarize
10	this page of evidence. Essentially Industry agrees
11	that there should be clear statements of management
12	objectives and strategies in the timber management
L3	plan, but the plan must also state that these
14	statements of objectives or statements of strategies
L5	are subject to change in light of wood supply dynamics.
16	Is that a fair summary?
17	A. That's a fair summary, yes.
18	Q. Now, can I ask you this, sir, is the
19	Industry asking that timber management plans include a
20	statement to the effect that the objectives and
21	strategies are not cast in stone, that they are in fact
22	subject to change or variation at any time? Is that
23	what Industry is asking for?
24	A. I would like to answer your question
25	this way; and, that is, these plans are for a five-year

period and being we can't predict the future we don't know what's going to happen.

We can establish in our plans and incorporate into our plans reasonable futures that we would expect may happen, but the reality of the situation is that what we have in our TMP, or any other plan for that matter, is not going to happen exactly as we put in the plan.

What we wanted to do -- what we were trying to establish with this statement is that we wanted to make it perfectly clear to the public the realities of planning insofar as things are going to change and that there is a possibility, yes, that a strategy may have to change or an objective may have to change. We would hope that it wouldn't, but by the time we finalize our plan that, to our best knowledge, is what is going to happen.

- Q. Would you agree with me that a statement to that effect may in fact lead to the type of confusion or misunderstanding on the part of the public that you are trying to avoid?
- A. No, I don't. I think if we explain to the public exactly what our timber management strategies and objectives are and why we have them as a first step in the process of understanding, the next

1	step of course is to explain that things can change.
2	We may have a forest fire somewhere, for
3	example, we have no way of predicting whether that is
4	going to happen, we may have a large blowdown such as
5	what the Board saw in the Dryden District and we have
6	no way of predicting that. If that should happen, then
7	the timber management strategies and objectives are
8	going to change, there is nothing we can do about it.
9	I don't think that's confusing, I think that's just
.0	reality.
.1	Q. Well, how would such a change be
.2	effected? I assume that would be done through the
.3	amendment process?
.4	A. Yes, it would be. We also spoke to
.5	the establishment of committees in our evidence, not in
.6	this particular panel, but in Panel 10 which will be
.7	presented, also in our terms and conditions.
.8	The amendment process is an integral part
.9	of that, where we would say that if something of that
20	nature should happen, a major change to a management
21	plan, likely it would be a major amendment and it would
22	involve the input of our various committee levels
23	which, of course, include the public.
24	Q. So are you saying that a change to a
25	management objective or strategy would in fact

1	necessitate a major amendment?
2	A. It would depend on the magnitude of
3	the change, Mr. Lindgren. If it changes the overall
4	objectives of management it would require an amendment,
5	whether that would be a major or a minor one would
6	depend entirely on the circumstance. Could you give me
7	an example?
8	Q. No, I think that you've answered the
9	question.
10	A. Okay.
11	MR. CASSIDY: I can advise the Board we
12	will be hearing more from the Industry in Panel 10 and
13	Mr. Lindgren can cross-examine them on that as well.
14	MR. MARTEL: By and large then you are
15	not talking about - if I gather correctly what you are
16	saying - changes that would occur quite frequently, you
17	are talking about situations that might arise that you
18	can't forecast but aren't just willy-nilly changes in
19	every year in every plan across the province?
20	I think it might be one of the fears that
21	Mr. Lindgren has, anything comes along and you can
22	request a change and that which would destroy the basis
23	of the five-year plan.
24	MR. SALTARELLI: Yes. Given that we have
25	established management objectives and strategies, Mr.

1	Martel, a change that would have an impact on those
2	strategies or change them in one respect or another
3	would be fairly significant. I don't think it would
4	happen all that often.
5	MR. MARTEL: All right.
6	MR. LINDGREN: Q. A few moments ago you
7	indicated that the timber management planning process
8	should contain some large degree of flexibility to
9	accommodate those changes.
10	Now, my question to you is this: In the
11	Industry's view, is the current planning process
12	flexible enough or does Industry have some suggestions
13	as to how to make it more flexible to accommodate these
14	changes in a timely manner?
15	MR. SALTARELLI: A. By and large the
16	current planning system has a great measure built in

current planning system has a great measure built in for flexibuility; in other words, we have the ability to allocate our entire maximum allowable depletion even if we don't need it all, we have the ability to carry over areas from one planning period to another.

This is sort of the transition time when we are not quite sure when our operations are going to end and where they are going to end physically. We have the provision to allocate a so-called contingency area within our approved plan and that gives us about a

1	20 pe	rc	ent w	windrow,	if	I	may	use	that	term,	in	case	we
2	have	to	chang	ge locati	on	of	ope	erati	ons.				

However, given all those -- given all those criteria of flexibility, there are still situations that arise that demand amendments. It could be that our contingency area may be in the location that we don't intend or don't have an option to moving to, so in that respect flexibility is definitely limited.

If we can effect an amendment to a plan rapidly, and I use rapidly as a relative term, it could be in a period of six months or three months or a couple of weeks depending on the circumstances, then the planning system would be adequately flexible as far as we're concerned.

Q. Do you have any specific proposals for reforming the amendment process?

MR. CASSIDY: Madam Chair, I don't know whether Mr. Lindgren has read our Panel 10, but the purpose of our Panel 10 is just precisely that point and Mr. Lindgren can cross-examine here if he wants, but I think we are really going to end up in the situation where we might end up repeating ourselves. It is going to be dealt with in Panel 10, that's the whole substance of that panel.

1	The purpose of this panel is to explain
2	some of the wood supply considerations and actual
3	proposals on planning are naturally left to the
4	planning panel.
5	MR. LINDGREN: Very well.
6	Q. Could I ask you to turn to page 35 of
7	the witness statement, please?
8	MR. SALTARELLI: A. I'm there, Mr.
9	Lindgren.
10	Q. The second paragraph indicates that:
11	"it should be remembered that Industry
12	members make a variety of forest
13	products. Given this, the available
14	technology in the mills, and the quality
15	demands dictated by the processes and
16	markets for those products, there is a
17	diversity of wood supply needs within the
18	Industry."
19	It goes on to indicate:
20	"The diversity of supply requirements,
21	which include size, species, uniformity
22	of species mix, freshness and wood
23	quality characteristics among other
24	factors, must be taken into account by
25	timber resource managers.""

1 Now, I think in some of the evidence of 2 the other members of this panel we have heard about these various requirements, Industry requirements. 3 But in light of this particular 4 5 paragraph, Mr. Saltarelli, does the present licensing 6 or FMA licensing system, which effectively ties up 7 large portions of land or the productive land base to 8 single companies, does that complicate or hinder the timber resource manager's ability to meet the wood 9 10 supply needs? 11 MR. SALTARELLI: A. From my experience 12 it doesn't seem to. If you take a look at Mr. Magee's 13 evidence, for example, he gave evidence to the effect 14 that he was drawing wood or pulling wood, as he said, 15 from four FMAs and a number of Crown management units 16 and so on and he does so effectively and effectively 17 supplies the wood for his mill, and that would indicate 18 to me that it's not a constraint. 19 Q. Well, you have referred to Mr. 20 Magee's particular example, so you are telling me that 21 generally the Industry doesn't perceived this to be a 22 constraint? 23 I am saying that that's my general 24 impression. I can't speak for the Industry in that 25 respect.

1	Q. Well, who are you speaking for when
2	you sitting here on this panel?
3	A. I am speaking of wood supply, not
4	licensing; that's a totally different issue.
5	Q. Well, wood supply and licensing, they
6	are pretty inter-related or intertwined contents; are
7	they not?
8	A. No, sir, they're not. They're
9	related but they're not very closely related.
10	Q. We will deal with that in a moment,
11	but before I leave licensing per se can I ask you this:
12	Does the Industry see the licensing system, which
13	effectively ties up large portions of land for extended
14	periods of time, does Industry see that as being
15	consistent with the free market philosophy that we hear
16	so often from Industry?
17	A. I don't know how Industry uses that,
18	sir.
19	MADAM CHAIR: Don't you think that
20	question should be directed to Mr. Atkinson or Mr.
21	Magee.
22	MR. LINDGREN: Very well, if they are in
23	a position to reply.
24	MR. ATKINSON: Madam Chair, I could give
25	you my own opinions on those if that is of any value to

1 this hearing.

name?

After being in the forest products industry for the last -- more years that I would like to think about, almost 40, I think if you look at Ontario and where the plants are and where the wood is and the size of a unit, such as a pulp and paper company with a huge installation that costs hundreds of millions of dollars, and then you talk about opening up Crown timber to competitive bidding, the question is who is going to bid on it. Not me, I haven't got hundreds of millions of dollars to compete in that game and even setting up a saw mill like the one I've been talking about today costs, if you start it now, \$50-million.

I don't think there's too many people who are going to compete in this game, and what we see in an area where you have 90 per cent or more Crown land is that there won't be any industry. There wouldn't have been any industry if they had to come in on open competition initially and invest what were huge amounts of money in the 1920s. They wouldn't be here yet if they had to operate on that basis.

So I have trouble -- Mr. Lindwin is your

Q. Lindgren.

Farr & Associates Reporting, Inc.

1	A. Lindgren, sorryvisualizing who
2	is going to bid on this timber. If you threw it open
3	tomorrow on CP Forest Products licenses who would bid
4	on it, you know, for a million and a half cords a year
5	or something? I think there would be a pretty scarce
5	number of people that would look at it even.

And maybe there's another concept of how you would have competitive bidding, but the competitive bidding that does go on in Ontario at the present time is on a very small scale, as I think we're all aware. It's in the -- part of a management unit or something like that.

Q. Mr. Magee, do you have anything to add that to answer?

MR. MAGEE: A. No, I don't.

Q. Well, I have a question for you anyways. In your evidence a few moments ago you indicated that part of your wood supply needs is met through obtaining or purchasing wood from FMA holders and you also indicated that you're not currently actively involved in the timber management planning process on those units; i.e., you're not a member of the timber management planning team, but you wish that you were more involved or you wish that you would be there on an advisory committee, I assume.

1	My question is this: Has that licensing
2	system; i.e., the FMA units that you deal with, does
3	that in any way constrain or limit your ability to meet
4	your wood supply needs?
5	MR. MAGEE: A. I have to back up to the
6	first part of your question. I think you talked about
7	FMAs and you talked about planning committees; is
8	that
9	Q. Well, I was just trying to give my
10	question a little bit of context. You indicated that
11	you did take some wood from FMA units?
12	A. Yes, we do.
13	Q. And you are not currently involved in
14	the planning for those units?
15	A. Not for the FMAs, no. We are
16	consulted as the plans approach us and we are aware of
17	where the allocations are going to be before we attend
18	the first open house.
19	Q. Okay. Now, I take it that you see
20	participating on the team in an advisory capacity as a
21	good thing?
22	A. Yes.
23	Q. And the reason I presume that you are
24	on these or acting in an advisory capacity is to
25	make your needs known or make your views known in terms

1	of your supply wood requirements?
2	A. Yes, and I think to act as technical
3	and professional have some technical and
4	professional input. I have been in the area a long
5	time, some of the members on the team have not been
6	there for a very long time. We are speaking about
7	Crown planning teams now, and the particular one I am
8	involved with is the Shining Tree.
9	There was some discussion whether I am a
10	member of the team or not, I think it came that I will
11	go to the meetings, but I will not be an author to the
12	plan or a member of the team. There is another company
13	representative as well on that in the same position I
14	am.
15	Q. Now, at page 69 of the witness
16	statement, Mr. Magee, you outline the various methods
17	by which your company or the Grant company procures
18	its wood. Now, the wood that you obtain from the FMAs,
19	does that fall under paragraph (b), first right of
20	refusal?
21	A. Not all FMAs are the same. I have to
22	think about that. No, not under (b).
23	Q. Well, which item would it fall under?
24	A. Well, if I could just discuss it.
25	One FMA, presently we are licensed directly; another

.1.	rma, there is on operator who is into a situation in
2	(e) where the poplar wood must be sold to Grant;
3	another FMA, we are just at the point of signing a
4	third-party agreement; another FMA, we have the right
5	to go in there and buy the wood like anybody else.
6	Q. So there is some element of
7	competitive bidding that is undertaken by Grant to
8	obtain its wood from FMAs?
9	A. There are other poplar users in the
10	woodshed, certainly, that buy the wood, yes.
11	Q. Okay. Could I ask you to return to
12	paragraph (b) on page 69, it is indicated that:
13	"Grant has the option of buying the wood
14	at the stated price of its competition;
15	if the purchase is declined the licence
16	holder can sell its wood elsewhere."
17	Can you explain to me what is meant by
18	the phrase 'at the stated price of its competition'?
19	A. Well, there is a mechanism in place
20	where we get our wood at first right of refusal and
21	also takes place sometimes on, I understand, conifer
22	going out of the province.
23	In our case, the person who has the wood
24	does the shopping first and gets his best price, he
25	comes to Grant, grant has the right Grant can match

1	it and buy the wood or else let that wood go.
2	Generally that's how it works.
3	Q. So, in other words, the operator's
4	selling price is controlled?
5	A. No, he goes and shops and gets his
6	best price and Grant has the right to buy the wood at
7	that stated price or to let the wood go to the highest
8	bidder, higher bidder.
9	Q. It can go to a higher bidder only if
10	you refuse?
11	A. I am having trouble with that
12	question, it can go to a higher bidder if I refuse. I
13	have the Grant has the right to match the highest
14	price in the area.
15	Q. That's right. But I think the
16	statement suggests that if for whatever reason you
L7	decline the purchase of that stated price
18	A. That's right.
19	Q then it can be sold elsewhere,
20	presumably to a higher bidder
21	A. No.
22	Qor to someone who could
23	A. As I understand it, it goes at that
24	stated price.
25	Q. So there is no possibility that a

1	higher bid may in fact be received if you decline it?
2	A. I don't know.
3	Q. Okay.
4	MADAM CHAIR: Mr. Lindgren, I think the
5	point of what Mr. Magee was saying is that that was the
6	highest bid. The seller goes out and finds the price
7	for his wood and sets the price and Grant can take it
8	at that price or say: It is too much, sell it to
9	whoever offered the bid.
0	MR. LINDGREN: I understand the
1	mechanism.
2	Q. I am just wondering, again, does
3	Industry see that as a legitimate part of the free
4	market system?
5	MR. MAGEE: A. It's workable and it
6	keeps the third party or the operators with that wood
7	happy. It works. I don't think it's perfect.
8	MR. MARTEL: Have you ever had any
9	complaints that it doesn't, that the small guy is
0	getting squeezed in a sense, is that in fact as he
1	is attempting to sell his wood there is a possibility
2	that he might not get what the value of the wood is
3	simply because there isn't enough competition there?
4	MR. MAGEE: Do you want me to speak to
5	that, Mr. Martel.

1	MR. MARTEL: Yes.
2	MR. MAGEE: I believe what you say is
3	true, yes. Certainly where we are there's a lot of
4	small contractors in the very realistic forest. If it
5	is a must sell situation it bothers them.
6	MR. MARTEL: But there is no other way,
7	though?
8	MR. MAGEE: There could be some long
9	discussion on it. The system in place there works now
10	and perhaps the Ministry has some other means in mind
11	of disposing of the wood, but it works, for the per
12	cent of wood to be getting it's all right.
13	MR. LINDGREN: Q. Now, when you say 'it
14	works', you mean that your wood supply needs are being
15	fulfilled?
16	MR. MAGEE: A. Yes, and that first right
17	of refusal wood does flow in. It has been invoked in
18	several cases and that's how it is.
19	Q. Okay. Mr. Saltarelli, if I could
20	return to you and ask you to turn to pages 36 and 37 of
21	the witness statement.
22	MR. SALTARELLI: A. I'm at page 36, Mr.
23	Lindgren.
24	Q. Okay. Now, again to paraphrase this
25	evidence, I think you suggested this morning that

1	Industry supports the evidence by the MNR to increase
2	the accuracy and usefulness of the FRI, and you also
3	indicated this morning that in spite of the limitations
4	of the FRI it's a useful tool for macro-level planning.
5	Could I ask you to very briefly indicate
6	what in Industry's views or in the Industry's
7	opinion what are the principal limitations of the FRIs
8	that now exist?
9	MR. SALTARELLI: A. The basic limitation
10	of FRI this is really really falls back on a
11	misuse of FRI, the use for which it's not intended, is
12	when timber managers attempt to use it on a stand level
13	basis that is the basic limitation of FRI but, again, I
14	believe that was never the intention of the FRI.
15	Q. That's the only drawback that you
16	perceive with the FRI as it currently exists?
17	MR. CASSIDY: I thought he said the main
18	drawback.
19	MR. SALTARELLI: Yes.
20	MR. FREIDIN: Basic limitation.
21	MR. CASSIDY: Basic limitation.
22	MR. LINDGREN: Q. Are there other
23	limitations in Industry's view?
24	MR. SALTARELLI: A. There are some. For
25	example, the currency of FRI, for example FRI is

1	generally undertaken on a 20-year cycle and with any
2	source of information as it grows older it becomes less
3	and less reliable, so that's a drawback.
4	There are possible limitations in the
5	quality of FRI depending upon the scope of the
6	photointerpreter.
7	Offhand, Mr. Lindgren, those are the
8	three I can think of. There may be others but those
9	are the ones I can think of.
.0	Q. Now, I think you've indicated earlier
.1	that you have reviewed the Panel 3 evidence offered by
.2	Dr. Osborn and others on wood supply?
13	A. Yes, I have.
. 4	Q. And you recall Dr. Osborn discussed
15	the FRI at some length?
.6	A. Yes, I do.
17	Q. And I hope it is not necessary to go
18	to the transcripts or the exhibits, but can you confirm
19	for me or does Industry agree that, well, for example,
20	that the gross total volume estimates that are derived
21	for a stand based on the FRI is also based on the
22	assumption that the predominant species is the most
23	important and this can in turn result in small and
24	larger erros in terms of estimating volumes for the
25	other species?

1	A. Yes, on a stand-by-stand pasts that s
2	quite correct.
3	Q. That's part of the misuse of the FRI
4	that you were referring to?
5	A. Yes, sir.
6	Q. Dr. Osborn also indicated that FRI
7	does not identify land use or alternative potential
8	uses, it just indicates the presence of production
9	forest and land tenure. Does Industry perceive that to
10	be a limitation on the usefulness of FRI?
11	A. From the standpoint, Mr. Lindgren, of
12	timber supply planning, not necessarily. There are
13	going to be impacts of other users on timber supply,
14	that's true, but that's something they can deal with in
15	another plane. We can incorporate an example such as
16	the HSG model to answer those questions and put some
17	spacial reality into the FRI.
18	So, again, the FRI is a really good basis
19	for determining on a global plane, the strategic level
20	what wood supply is. If you are going to attach other
21	parameters to that inventory, it might be best left to
22	some sort of overlay on FRI, not FRI itself.
23	Q. Now, in light of, I guess, the
24	limitations of FRI, you have indicated that Industry
25	sometimes undertakes efforts or initiatives to generate

1	supplemental information.
2	A. That is correct, yes.
3	Q. And so some of the examples that you
4	offered was or included supplementary aerial
5	photography and operational cruising and other sorts of
6	methods that are designed to obtain more stand specific
7	detail?
8	A. That's correct.
9	Q. Now, let me ask you this then: How
10	often would some of these supplementary methods be
11	undertaken and under what circumstances would Industry
12	contemplate that that would be necessary?
13	A. It would depend on a large array of
14	factors actually. How often? It would depend, first
15	of all, on what information is missing. You would have
16	to look at it on a specific case-by-case basis.
17	If you are looking at a TMP, for example,
18	and that on that sort of a schedule it would be
19	every five years, that's how often it would be. If you
20	are looking at it on an annual work schedule, it could
21	be every year.
22	I gave an example of an order for a
23	specialty product that's going to be received, it's
24	conceivable to me that a silent operator might want to
25	hustle with there with a helicopter looking for some

1	whatever it is he has to cut, tamrack or whatever the
2	case may be, because that's what the customer wants.
3	So it would vary considerably, but I
4	would think the most extensive time frame that one
5	would want supplemental information would be five years
6	to correspond to a TMP period.
7	Q. Well, let me focus for a moment
8	specifically on operational cruising, and in light of
9	your answer are you saying that operational cruising
10	should be carried out at least once every five years?
11	A. I'm not saying that at all.
12	Q. Okay.
13	A. It depends on the circumstance. If
14	the timber manager feels that he needs operational
15	cruising to answer some of his questions, then
16	obviously he is going to do it or he should do it.
17	Q. And under what circumstances would he
18	pose that type of question?
.9	A. Oh my, there are all kinds of
30	circumstances. A tight timber supply for example,
21	specialty products for example, fairly gross
22	variability in the resource.
23	Taking, for example, dealing with large
24	tracks of jack pine on the same basic agent as the fire
25	went through back in 1917, you could have a pretty good

1	idea what he had out there and he is not going to want
2	to do an OPC because it's expensive and it's going to
3	yield data that's not worth the money.
4	But if he has a whole array of stands
5	that are a result of all kinds of different
6	disturbances and different species composition,
7	different ages, different structures and wood supply is
8	tight and he is managing for a specialty product or
9	even a particular product, not even a specialty
10	product, he may want more information about that area
11	he is managing. So it is going to change according to
12	circumstances.
13	Q. So I think, if I am interpreting your
14	last answer correctly, if the manager is presented with
15	mixed stands or stands that have mixed age class
16	components he might think about an OPC?
17	A. He might, it wouldn't be automatic
18	again. He may have a lot of local knowledge about
19	those particular stands and those circumstances, he may
20	have volume surveys that he did relative to what was
21	harvested several years back relative to what the FRIs
22	said was there.
23	It would depend on awful lot on what kind
24	of data he had, whether it was local knowledge or
25	something, in letters or something or what have you.

1	An OPC would not be automatic under all circumstances.
2	Q. Would an OPC be considered where
3	there is some question or concern about the operability
4	of a particular site or stand?
5	A. If that manager cannot answer the
6	question another way relative to operability, then
7	obviously yes, he would go and look at it on the ground
8	or else he can rent a helicopter and fly over the area.
9	Q. Now, you may recall this, in Dr.
10	Osborne's testimony in Panel 3 he indicated that ground
11	cruising may cover only five to ten per cent of a
12	unit's production forest. Are you in a position to
13	confirm or deny that?
14	A. I recall reading that, yes.
15	Q. Is that generally your understanding
16	of the percentage?
17	A. The context that statement was made
18	in had to do with the rotation age being roughly one
19	every hundred years, 1/100th of a land base, and that
20	general speaking industry manages or operates on a
21	five-year basis, therefore, the Industry would be most
22	particularly interested in the area plans to manage
23	over that five-year term. So five times one per cent
24	is five per cent, roughly.
25	A. Yes, that is the context. Could you

1	ask the question again, please?
2	Q. Well, Dr. Osborn simply indicated
3	that five to 10 per cent of a unit's production forest
4	may be cruised?
5	A. That's correct.
6	Q. And that's your understanding.
7	A. My understanding.
8	Q. It's fairly accurate?
9	A. Yes.
10	Q. Now, Dr. Osborn also indicated that
11	for the last five or six years however - I think he's
12	referring to the period from '82 to '87 - the amount of
13	operational cruising has in fact decreased. Are you in
14	a position to confirm or deny that?
15	A. I can't confirm that's the case and I
16	don't recall that specific statement specifically. He
17	may have said that, I can't if we had the transcript
18	I could verify that for you.
19	Q. Okay. Well, I am just simply trying
20	to determine whether or not you know if there has been
21	an increase or decrease in the amount of operational
22	cruising?
23	A. Across the border, no, I don't know.
24	Q. You are aware that there have been
25	certain reports that have advocated or recommended the

1	Increased use of operational cruising.
2	A. Could you be more specific?
3	Q. Well, again I hope it's not necessary
4	to pull them all out, but I can tell you that there are
5	documents in this hearing; namely, the Rosehart Report
6	and reports by Raymond Mervart that suggest that:
7	"In light of the problems with FRI, there
8	should be more operational cruising
9	undertaken to ensure that more
10	site-specific and stand-specific detail
11	is learned prior to the harvest."
12	Are you aware of such recommendations?
13	A. I read the Rosehart Report when it
14	came out back in September, '87 I guess it was, and
15	that may have been a recommendation; however, I as a
16	manager would say I am not going to go out and collect
17	that information unless I need it.
18	It makes no sense to me at all to expend
19	that amount of money, and OPC is expensive, for
20	information that offers me no sort of benefit. If I
21	need the information, then I should go and get it; but
22	if I can get the information elsewhere, from aerial
23	photography or local knowledge or some sort of volume
24	study ledgers, then that is where I am going to get it

if it's adequate for my needs. It depends totally on

25

1	the objectives of management.
2	Q. Okay. It's not necessary to pull
3	this out, but in Volume 26 - I do have the number right
4	this time - at pages 4447 and following there is a
5	discussion on this very subject by Dr. Osborn who is
6	being questioned by Mr. Castrilli.
7	And on page 4447 Dr. Osborn agrees with
8	Mr. Castrilli that in certain circumstances operational
9	cruise is the most sensible way of providing that
10	additional information.
11	A. I agree totally.
12	Q. You agree. And I think a few moments
13	ago we discussed what some of those circumstances might
14	be, concerns about terrain or operability, concerns
15	about mixed wood stands or the volume therein
16	contained, those kinds of things are situations where
17	an OPC might be advisable; correct?
18	A. Yes, very correct.
19	Q. Now, given that those
20	circumstances well, let me rephrase that. Would you
21	have any difficulty if those circumstances were
22	transformed into criteria and imposed as a term and
23	condition of this Board; i.e., if the Board required
24	that under certain circumstances; i.e., there is
25	concern about operability, there is mix woods stands,

1	Some of the concerns of circumstances that we have
2	discussed, if the Board imposes that as a criteria
3	wherein it's mandatory to carry out operational
4	cruising, would you have difficulty with that?
5	A. I would have difficulty with the
6	Board mandating operational cruising, yes.
7	Q. In certain circumstances?
8	A. Even in certain circumstances. With
9	respect to the Board, I don't think they are in a
10	position to judge what circumstances are. I don't
11	think I can sit here and explain how circumstances
12	change and how they differ. I think it has to be a
13	professional decision made by the forest manager.
14	Q. Well, I thought we just discussed
15	some of those circumstances wherein the manager may
16	decide to have operational cruising?
17	A. I said may decide, not will decide.

19

20

21

22

23

24

25

It may be -- it kind of falls into the category of need to know and nice to know. If the manager needs to know that information and he feels that strongly about it, then he will go and get it.

may just go ahead and operate.

He may decide because the product he's after is such

low value, for example - I'm just pulling this out of

the air - particleboard, it doesn't too much to him, he

1	Alternatively if he needs to know the information and
2	his budget doesn't allow him to go and look for it,
3	maybe he'll defer management of that area for a number
4	of years.
5	It really boils down to a management
6	decision on the basis of what the forest manager knows
7	and what his level of expertise happens to be.
8	Q. Well, Dr. Osborn seemed to indicate
9	that at least in his experience there are circumstances
10	where an operational cruise would be the most sensible
11	way to get the additional information that's required.
12	MR. FREIDIN: He didn't suggest that it
13	was mandatory in any sense of the words.
14	MR. LINDGREN: Mr. Freidin, deal with it
15	in reply. I'm putting a question now.
16	MR. FREIDIN: Well, don't misquote the
17	evidence of my witnesses, please.
18	MR. LINDGREN: Well, I'm quite satisfied
19	that I did not misquote Dr. Osborn, he did say, and I
20	repeat:
21	"I agree that in certain circumstances
22	operational cruise is the most sensible
23	way of adding that additional
24	information."
25	Q. I subsequently said, he seems to

1	contemplate that there are circumstances where an
2	operational cruise is the most sensible way of
3	obtaining the information.
4	MR. SALTARELLI: A. Well, Mr.
5	Lindgren
6	Q. Are you telling me that
7	MR. CASSIDY: Let the witness answer the
8	question.
9	MR. SALTARELLI: I don't know what Dr.
10	Osborn was thinking and judging by this transcript he
11	didn't specify what those circumstances are.
12	I think he's perceiving, as I perceive,
13	that there could occur a set of circumstances, not a
14	specific set that you can write down and define under
15	which you are going to want to go out there and get
16	supplemental data.
17	I accept that, that is going to happen,
18	there is going to be circumstances in which you are
19	going to have data, but I can't write those
20	circumstances down such that every time they happen you
21	have to go and get supplemental data.
22	MR. LINDGREN: Q. And that was my next
23	question: You can't codify those circumstances?
24	MR. SALTARELLI: A. That is correct.
25	O Okav

1	MR. LINDGREN: I have one or two final								
2	questions on OPCs, Madam Chair. I would like to put								
3	them before the break, if that's possible. I can deal								
4	with it fairly quickly, but I'm in your hands.								
5	MADAM CHAIR: I think we will have the								
6	break now, Mr. Lindgren.								
7	MR. LINDGREN: Thank you.								
8	MR. SALTARELLI: Thank you, Madam Chair.								
9	Recess taken at 3:08 p.m.								
10	On resuming at 3:30 p.m.								
11	MADAM CHAIR: Please be seated.								
12	Mr. Lindgren?								
13	MR. LINDGREN: Thank you, Madam Chair.								
14	Q. Mr. Saltarelli, before the break we								
15	were discussing operational cruising. I did have a								
16	couple of additional questions to pose to you.								
17	Could I ask you to have in front of you								
18	Exhibit 1073 which is the package of interrogatories								
19	filed by Mr. Cassidy.								
20	MR. SALTARELLI: A. Yes. Just a minute,								
21	please.								
22	Q. If you could turn to page 7 of that								
23	document.								
24	A. Bear with me, Mr. Lindgren, my copy								
25	is scrambled, but I have it here. This is MOE's								

A. No. 3, yes. Q. Right. The answer seems to indicate
Q. Right. The answer seems to indicate
that or seems to list various types of information
that could be or should be collected to further refine
the FRI database; is that correct?
A. It could be, yes. But again, if I
may just expand upon that, please? This was in respect
to making timber management decisions, decision support
systems is what it's referring to there.
Q. Now, without going through each
bulleted item in particular, would you agree with me
that most of this information could be gathered through
operational cruising?
A. No, I wouldn't agree with that.
Q. Which ones could not be?
A. For example, growth progression is
not something you can gather from operational cruising,
that is something that is generally established through
what's called constructive sampling.
Storage on the stump is not something
that can be accumulated by operational cruising,
that's again, I understand it stems from the growth
and yield.

Response to silviculture intervention.

1	Operational cruising essentially looks for volumes and
2	response to silviculture intervention would be a
3	silvicultural survey.
4	Site species relationships. That to me
5	would be a long-term research project of some kind.
6	Stand dynamics is growth and yield, again
7	that is long term as well.
8	Q. Okay. Well, I think I should have
9	rephrased my question. Perhaps this information could
0	not be collected under the current methods by which
1	operational cruising is carried out but, for example, I
2	understand that the ability of the stand to store wood
.3	on the stump is very much a feature of the site class
.4	of the area; is that correct?
5	A. It can be. Actually it's probably
.6	more important characteristics or features that one has
.7	to consider especially when you are looking at
.8	something like black spruce. The lower the site class
.9	the longer one can store on the stump. If the site
0	class has been adequately defined in FRI, then that
1	question is pretty much answered for you.
22	Q. Sorry, could you repeat that last
13	portion of your answer?
24	A. Site class is a particular feature to
5	FRI, it appears nowhere else. FRI site class X, 1, 2

and 3 in descending order of quality, and if we say
there is relationship between site class and storage on
the stump then we are saying that we can look at FRI
and given that the site class is currently assigned, we
can come to some sort of value judgment about storage
on the stump.

2.3

Q. Well, that's a big if; isn't it, if the site class has been properly identified through the FRI?

A. I wouldn't call it a big if, no.

Q. Well, there has been evidence in this hearing, Mr. Saltarelli, to suggest that mistakes in photointerpretation can result in some fairly substantially misclassifications, in fact it can result in a site class error in the amount of 1 to 1.5 classes. Are you aware of that?

A. I recall something to that effect in the evidence of Panel 3 and I can envisage that situation happening, although I don't think it's a common occurrence by any means.

I think because site class is essentially a function or arithmetic function of height over age, if the photointerpreter miscalculates one or the other, there is going to be some sort of error in site class designation.

1	When we were talking about black spruce
2	just a bit earlier, if you will indulge me, and those
3	sort of errors are not altogether common when one looks
4	at black spruce stands. Black spruce stands are
5	particularly easy to interpret from photographs.
6	Q. Do you have any evidence to document
7	that?
8	A. Just my own understanding of it,
9	since I work with FRI not quite on a daily basis but
10	quite often and the management unit in which I work,
11	the Iroquois Falls Forest, is 79 per cent black spruce
12	forest, I feel that I have a pretty good understanding
13	of the relation to FRI of the Iroquois Falls Forest and
14	the actual forest out in the field, it's a pretty good
15	one.
16	Q. Well, perhaps you do, but the point,
17	sir, is this: Mistakes in the interpretation of the
18	heighth of a tree can result in site class error and
19	that kind of error could be corrected through more
20	operational cruising; correct, more ground cruising of
21	the estimates that are made?
22	A. That's quite possible in that
23	circumstance, but I think we would have a difficult
24	time deciding where the error has occurred.
25	I think the only way you would know in

some circumstances is to go out and measure the height and age of every single stand in the inventory. The cost benefit of that would be highly suspect.

In other words, if you feel that the error is something that is across the management unit, that your photointerpreter has misinterpreted heights by -- he's overestimated heights or underestimated heights, then that inventory is very reliable. He's wrong but he's consistently wrong; therefore, you can apply a factor to it and adjust your site classes accordingly. It's very easy.

- Q. And how often is an FRI correction factor applied?
- A. I can't answer that because I'm not familiar with every FRI in the province. In terms of the FRIs with which I am familiar, and that would be probably seven or eight of them, correction factors in terms of volume are applied pretty much across the board. FRI in circumstances with which I am familiar, tends to overestimate volume.

Again, that is not a problem because it overestimates volume consistently, so we can apply a consistent factor and adjust it downwards.

Q. In your estimation how large is that overestimate?

1	A. It varies. It could be 20 per cent.
2	It varies in species quite often too. We have
3	adjustment factors for every species and every working
4	group. It could be very high for balsam fir, for
5	example.
6	The FRI says there is a given volume in a
7	certain area, the volume may be there but perhaps only
8	half of it is usable because of bud rot or stem rot or
9	what have you. We deduct for cull, we deduct for
10	branches and other means and sorts of deductions are
11	out there in the field.
12	Q. Okay. To this point I have been
13	discussing operational cruising as a method to obtain
14	further silvicultural information about the stands.
15	Are you aware that there have been proposals to combine
16	current operational cruises with cruises designed to
17	obtain information on non-timber or wildlife variables?
18	A. Can you be more specific, sir, what
19	proposals you're talking about?
20	Q. Well, you indicated you are familiar
21	with the evidence and testimony of Dr. Osborn in Panel
22	3 and Dr. Osborn did in fact refer to one such proposal
23	which for one reason or another was not carried out.
24	But were you aware of that?
25	A. Again, the proposal rings a bell,

it's a distant one. If I had the transcript I could read it and refresh my memory, I could answer your question more accurately.

Q. The point I am getting to is this,
Mr. Saltarelli: Given that industry's terms and
conditions call for the implementation of integrated
resource planning and it calls for the creation of an
integrated resource management system databank of some
sort — given that those are the terms and conditions
that have been put forward by the industry, would
industry support the increased use of combined
operational cruises that would gather further and
better timber and non-timber information?

A. Not without some sort of qualification. You would have to know, first of all, what information is required, we would have to know how much it was going to cost, because OPC in and of itself is a very expensive process.

Again, Mr. Lindgren, I think we would have to look at the thing on a case by case basis. It could become a very laborious process.

For example, If you went to a complete description of a given site or a given stand or polygon defined by FRI, you might want to collect information - and this again is going to more or less total holistic

approach - you might want to gather information on
soils, which would require that you dig a soil pit, you
might want to study hydrology, you might want to look
at flora, micro-fauna, you might want to look at the
habitat's suitability of that particular site from a
variety of viewpints whether it's reptiles or ungulates
or what have you.

So it's quite possible, depending upon the degree of definition you are looking for, that you could spend a week or two weeks or quite a long time in that one particular site studying that site to determine all these different features.

would be untenable, it would be totally impossible to undertake. So we would have to look at it and be specific and say: These are the things we have and we would like you to collect and this is what it is going to cost us, or give us the opportunity to determine what it's going to cost and what are the data are going to be used for, that is important to.

There is no sense collecting data if you are not going to use them. Then we could probably come to some sort of conclusion as to whether or not we would do it.

Q. Well, I would just like to repose the

question perhaps a bit more briefly this time, because

I am not sure I got the answer that I was looking for.

A. I'm sorry.

Q. The question was: In light of the integrated resource management planning goals that have been set out in your terms and conditions, would the industry support in certain circumstances the use of these combined OPCs to gather the kinds of information that is necessary to truly integrate timber and non-timber resources?

A. That goes back to an earlier response that says that the circumstances are going to change, they are going to be different. No one set of circumstances is going to be the same as another, it's like a fingerprint or a snowflake or what have you, they are all different.

And there are going to be circumstances, I am sure of that, although I can't qualify them or quantify them, there are going to be circumstances in which we are going to have to go out there and collect data to satisfy our terms and conditions and, in some circumstances, those data will include non-timber values.

Q. And is industry willing to underwrite the cost of gathering that additional information?

1	A. I can't speak for industry in that
2	respect because I don't know what the cost is going to
3	be.
4	Q. Now, this morning you spoke of some
5	of the other initiatives that industry is involved in
6	to supplement FRI information, you referred to GIS, for
7	example?
8	A. Yes.
9	Q. You have also referred to the NORMAN
10	and HSG models. Now, if I could ask you to turn to
11	Exhibit 1076.
12	A. Just one moment please, Mr. Lindgren.
13	Q. These are the overheads that you
14	filed with respect to the OWOSFOP, HSG and NORMAN
15	models?
16	A. All right. My overheads are not
17	numbered. Could you tell me which?
18	Q. Okay.
19	A. That's the OWOSFOP Forest.
20	MR. CASSIDY: Exhibit 1076, A through G.
21	MR. LINDGREN: Q. Okay. Could I ask you
22	to turn to page B and halfway down those bullet points
23	a statement to the effect that OWOSFOP is a poor
24	indicator of sustainable wood supply.
25	And then turn to page D, again halfway

through the bullet points there is an indication that NORMAN and FORMAN are potentially fair indicators of sustainable wood supply.

A. All right. I qualified and I was very careful to qualify that when I discussed this overhead. Because of the impression that particular bullet point can give, I saw that after the thing was filed, I didn't want to say that OWOSFOP was a bad model.

What I said was that in and of itself
OWOSFOP was a poor indicator of sustainable wood supply
and that it required that the forest manager take the
output, disaggregate it, go to the ledgers, go to the
maps and try to repeat the output to spacial
considerations and then it works. And that is exactly
how OWOSFOP is designed to be used.

And the context of that is, is that that disaggregation is a little easier to do using FORMAN and NORMAN and it's not even necessary using HSG, it's done automatically.

So in and of itself HSG is a much better indicator of sustainable wood supply than OWOSFOP is.

Q. Well, if you turn to page F you actually indicate that it's a potentially good indicator of sustainable wood supply.

1	A. That's HSG.
2	Q. Correct.
3	A. That's right.
4	Q. That's a little bit less definitive
5	than what you have just stated on the record.
6	A. Okay, let me qualify that. That is a
7	good point. If a forest manager loads HSG or any other
8	model for that matter with his set of assumptions and
9	with his growth progression curves and so on, runs the
.0	model and says: Gee, there is my answer, then
.1	potentially that is the right answer and potentially
.2	that is the best way to manage that unit, it's
.3	potentially. If he runs it a hundred times, that
4	potential expands by quite a bit.
.5	So that is what I was speaking to there.
16	It's much easier to run HSG a hundred times then to run
.7	OWOSFOP a hundred times and interpret the output.
18	Q. So if I summarize this document,
19	would you agree with me that there may be certain
20	limitations within the use of these models to predict
21	or indicate sustainable wood supply?
22	A. That is absolutely correct. As I
23	said, we are only mortal and we do not know what the
24	future is going to be, but I believe that it's better
25	to be quantitative and wrong than qualitative and

immeasurable, and that is what models provide us with, they give us some sort of measure of our management systems and that is important to us.

1 2

We know we are going to be wrong because we can't predict the future, if we could predict the future we would all be rich speculating on gold, but we can't, so we try just to -- we try to simulate the future just the best way we can just to get some insights into the systems.

- Q. Well, in light of the limitations inherent in these models and in light of the ongoing development of the models, of the refinement of the FRI and the development of GIS, would you agree with me that until these superior technical tools or devices are fully in place that it may be prudent to slow down or cap the level of harvest and management?
 - A. No, I wouldn't.
 - Q. Okay.
- A. Because these systems are on an ongoing evolutionary basis. 10 years ago OWOSFOP was state-of-the-art, we all thought it was a wonderful model. It still is a wonderful model, the same way a Model T is a wonderful car, but you wouldn't want to drive down the 401 in one.

Again, I think we as users have to catch

1	up to	technology	too,	there	is	that	technology	transfer
2	phase	that we have	re to	adjust	to	· .		

Anyone in the province just about who is a forester understands forest dynamics can run OWOSFOP, apply it -- disaggregate it, apply it to a situations and use it effectively. He can draw on a micro-computer that is very inexpensive and requires a fairly limited amount of data preparation, the output, and not that difficult to work with.

However, the number of users of FORMAN and NORMAN is a much more restricted group by virtue of knowing how to use it. It's not that difficult to learn, but again NORMAN has just really been introduced onto the Ontario scene and more and more people are starting to use it now, and I would anticipate that sooner or later it will be as wide spread in use as OWOSFOP is.

HSG is going to take a lot longer time because it's super high tech, not everyone has expertise to run it, not everyone has the hardware to run it or the software or the database for that matter. Again, it's a very selective, very specific database that not everyone has access to, and I would think that by the time we have waited for management planning to catch up with technology, technology is going to be far

1	afield again because technology is just going to keep
2	on moving, it's not going to sit still and wait.
3	Q. How far down the road do you foresee
4	HSG being fully available across the area of the
5	undertaking, if at all?
6	A. The primary dataset of HSG is FRI
7	that has been digitized, and that means that someone
8	has gone to a digitized table with a digitizing pen,
9	which is this one with a cord attached to it, and he's
10	traced every polygon and he's assigned attributes to
11	that polygon. That's a very slow, laborious process.
12	It would take, I estimate - and Dr.
13	Osborn would be better to answer this question - if MNR
14	put the thing into high gear they might have the
15	province digitized in five or six years, again that's
16	just a figure off the top of my head.
17	So if you want it to be applied
18	universally because of the physical limitations of
19	digitizing all that data. Remember the Iroquois Falls
20	Forest is a small FMA, it's about I guess 74,000 square

It's about that, and it required something in the neighbourhood of, what did I say, how many billion bytes. Something incredible. And that is

kilometres, I'm not -- or yes, hectares I guess it is,

I am not too sure about that.

21

22

23

24

1	a massive amount of information.
2	If you applied that kind of data
3	requirement across the board, it's pretty daunting. I
4	don't know how long it would take to collect all that
5	information and by the time it was collected I would
6	say that OWOSFOP would be I'm sorry, a HSG would be
7	obsolete. HSG may be obsolete in six month's time.
8	Q. Six months from today?
9	A. Quite possibly. There would be
10	something that is based by HSG that does more is what
11	I'm saying. The technology available for this sort of
12	modelling appears to be virtually unlimited because
13	computers are getting faster, storage capability is
14	jumping by leaps and bounds; it appears to be just
15	unlimited.
16	Q. Well, if I understand your testimony
17	correctly then, sir, are you telling me that you can't
18	tell me if or when HSG will ever be implemented in this
19	province?
20	A. It will be Excuse me?
21	Q. Implemented or used.
22	A. It's being used now.
23	Q. Well, more widely across the area of
24	the undertaking.
25	A. Well, no, I can't but I can predict

when all of the requirements to run the model will be satisfied.

I think anyone who is committed to using HSG, who says I'm going to digitize my forest land base, I'm going to acquire the hardware that HSG demands - again, it's going to be available on a PC very shortly - can do it. So the availability is there and the knowledge of that availability will become widespread very shortly. I don't how long it will take but it won't be very long.

The model has been presented to the GIS symposium in Victoria or Vancouver just a few weeks ago, it was presented in Montreal at the CTPA annual convention at the end of March, so a lot of people know about it and knowledge of that model is spreading very, very rapidly.

There are going to be other reports produced. Tom Morrow who is the author of the model is going to, according to his plans, produce an article for the Forestry Chronicle or some such similar publications for foresters around the province and Canada and even the United States are going to have access to that model. So anyone who wants it and is dedicated to it and likes what he sees can have that model..

1	Q. Provided that it can also be
2	afforded. You said it was an expensive process?
3	A. Well, the model is essentially free.
4	If he I don't think he is going to go out he or
5	she, a forest manager is going to go out and invest a
6	whole bunch of money in a geographical information
7	system just to run HSG.
8	HSG is a tool that borrows very heavily
9	on GIS technology and that forest manager is going to
10	acquire his or her GIS for lots of other reasons
11	besides HSG.
12	So I don't know if I have answered your
13	question, Mr. Lindgren, but the expense of the thing is
14	kind of a it is kind of a secondary consideration
15	when you consider what GIS technology is and what it's
16	used for primarily.
17	Q. Well, let's return to OWOSFOP which
18	is being used now.
19	A. Yes.
20	Q. Could I ask you to turn to page 40 of
21	your witness statement.
22	A. Sir, I have it here.
23	Q. The second sentence of the second
24	paragraph reads that:
25	"However, given the current imprecision

1	in linking allowable depletion of
2	forest area to actual volume recoveries,
3	and the inclusion of inoperable
4	and non-economic stands in the
5	production forest land base, surplus
6	calculations aren't imprecise. This
7	imprecision may cause a declaration of
8	surplus that may not, in fact, exist."
9	A. That's correct.
10	Q. Now, turning first to the issue of
11	linking depletion to actual volume recoveries. Can you
12	confirm for me that OWOSFOP calculates allowable
13	depletion in area not volume?
14	A. That iss correct.
15	Q. And, in fact, the volume estimates
16	are calculated for the depletion area on the basis of
17	FRI and other cruise information?
18	A. That's correct.
19	Q. Local information as well, knowledge?
20	A. That's correct, yes.
21	Q. So if there is a problem in terms of
22	the actual volume recoveries, would you agree with me
23	that this suggests or indicates that the FRI or cruise
24	data or the local knowledge is somehow deficient or
25	that they are inaccurate?

1	A. The FRI is without question deficient
2	in its relationship to volumes. That's something we
3	recognize and deal with or deal with that on a
4	day-to-day basis. There is no deficiency in OPC or
5	cruising becauses it's not related to regulation.
6	We are talking about regulation. Now,
7	there is a difference between regulation and
8	allocation. One would collect OPC data for a specific
9	piece of real estate; in other words, the five-year
10	plan. One wouldn't go out and collect data for his or
11	her entire unit because - well, for a variety of
12	reasons - it was expensive and the currency of the data
13	is important, so on and so forth, so OPC doesn't get
14	into it.
15	But you are quite correct in assuming
16	that volume recoveries are probably the FRI's weakest
17	link in this respect, in respect to regulation.
18	Q. And in that sense, I take it that
19	Industry agrees with Dr. Baskerville's suggestion that
20	the link between area of harvest and volume of harvest
21	needs some substantial improvement?
22	A. We agree with that; yes, sir.
23	Q. Now, could I ask you to turn to
24	Exhibit 1094 which is the package of interrogatories
25	that I filed on behalf of Forests for Tomorrow and I

1	would direct your attention to question No. 2.
2	A. Yes.
3	Q. This is where you reproduce the
4	statement that I've just read into the record and then
5	we asked:
6	"By what percentage are the surplus
7	calculations in error" and we asked
8	for examples, and the answer goes on to indicate that
9	it's essentially difficult to express the imprecision
10	in terms of a percentage because the things that affect
11	surplus calculation are not easily quantified.
12	Is that the sum and substance of that
13	answer?
14	A. That's quite correct, yes.
15	Q. Can you advise me, what kind of rang
16	of imprecision or inaccuracy that we are talking about
17	Are we talking about 50 per cent off, one per cent off
18	I am not asking you to expressly quantif
19	the imprecision, but can you give us a ballpark figure
20	How far off is it?
21	A. Are you asking for a specific
22	circumstance?
23	Q. Well, we asked for examples and we
24	didn't see any examples. We are still wondering what
25	kind of range of imprecision are we talking about?

1	A. That range is going to change so much
2	with, first of all, the FRI that it's based on, so much
3	with the area for which the harvest was produced, the
4	age of the FRI and so on, but I think it would be
5	faulty to hazard a guess and it would be just a guess
6	and I don't think it's really worthwhile.
7	Q. Did you write this answer?
8	A. I wrote the answer, yes.
9	Q. I take it that you are aware of
.0	situations where there has been imprecision?
1	A. Imprecision of surplus calculations?
.2	Q. Correct.
. 3	A. Yes, I have.
.4	Q. What's the largest that you are aware
.5	of?
.6	A. Well, again, even this is going to
.7	be a difficult concept for a non-forester to
. 8	understand, but even in a situation where we have a MAD
.9	run that depicts a certain area of maximum allowable
20	depletion and we have a number and we look at that
1	number, we look at the land base and we would say
22	something is wrong there and we know that something is
23	wrong, but it's very difficult to quantify.
24	We can if you are looking for a
25	ballpark on them, we can probably give a ballpark and

say that the MAD run says that there's whatever, "x" hectares available to MAD, our long range wood supply projections based upon a variety of models or sizes that we may undertake indicate that it is something less than that, then we can come up with some kind of percentage. And a situation I can think about is, again, Iroqouis Falls Forest and that's changed with -- I'm referring back to the study that was done back in 1983 based upon the OWOSFOP model that had been upgraded a bit.

It indicated that the OWOSFOP

overestimated by perhaps as much as 25 or 30 per cent.

I'm recalling back to 1983 now, so that was quite some

time ago. We ran the wood supply scenario for Iroqouis

Falls Forest using OWOSFOP and using HSG and that

indicated roughly the same.

If you try to relate volumes to OWOSFOP and you related volumes to the HSG there is a difference of a couple hundred thousand cubic metres a year which could be 25 or 30 per cent, but that's a very specific circumstance. It is quite possible with the random model for areas farther south the difference may be very slight or even greater.

Q. So you can't determine whether or not the figure you just gave me is typical?

1	A. Oh, no, I can't. I would say offhand
2	that it isn't.
3	Q. Okay. Would you agree with me by not
4	knowing or not being able to quantify the surplus,
5	aren't you in effect saying that you don't know what
6	the production land base is?
7	A. No. See surplus let's clarify
8	what surplus is now. Surplus falls out of OWOSFOP. It
9	means you have an area that is presently available that
10	exceeds your present needs.
11	If we were to say that we need that
12	surplus in future and then we can carry that surplus
L 3	forward on the stump in future, which is storage on the
L4	stump, if that area is needed it's no longer surplus.
15	Something that is needed is not a surplus, even though
16	it's still called a surplus by virtue of - meeting
L7	those criteria that you have - an area that is
18	available at the present time that you don't need at
19	the present time.
20	Have I answered your question?
21	Q. Well, I am looking at the last part
22	of the answer to Question 2, it says:
23	"such areas include"
24	Well, you are referring to areas that are
2.5	unsuitable for harvesting and you go on to indicate:

1	"such areas include sands and poor
2	access or marginal operability and those
3	areas for which a use other than timber
4	production may be contemplated."
5	A. That's correct.
6	Q. So that's why you sometimes end up
7	with a surplus that may in fact not exist?
8	A. Those are some of the reasons. I
9	guess it would be that if your land base includes those
10	areas and we know about those areas, then it's going to
11	give you apparent a MAD that is fairly larger than
12	it should be, but that's when you get down to looking
13	at the maximum allowable depletion on the unit level,
14	looking at the maps, look at the ledgers, rationalizing
15	the thing.
16	If the MAD says that you can cut a
17	thousand hectares and you know in this area that there
18	are 150 hectares of reserve, then you qualify your MAD.
19	It drops from a thousand down to 850 in that case. If
20	you know that part of that MAD in that area involves
21	marginal stands, then you attend to your allocation
22	accordingly.
23	So the key to the thing is, use the MAD
24	calculation as a tool and you manage around it.
25	Q. Well, let's turn for a moment to the

conclusion of these non-economic or inoperable areas.

The suggestion on page 40 is that their inclusion seems to be causing some sort of a problem in terms of the precision of the surplus declaration.

If that is the case, sir, the inclusion of those areas is causing a problem, then why are they included in the land base for determining the allowable cut?

A. They can be taken out. It is a bit of a chore, it is a large chore. It requires that each and every sliver is measured and where it's practical I think it's a good idea to take them out. It would give you a better idea of what your wood supply is, but there is a question here, an area that is marginal now or slated for other use now may change.

Five years down the road maybe that stand is going to be harvestable, maybe the use for which it was intended is going to change, perhaps the canoe route is no longer applicable, perhaps the managing for beaver is no longer a concern because the trees grew bigger and the beaver have left.

What I'm saying is that there is a dynamic resource out there, so you may want to withdraw some areas and those mechanisms do that in FMAs, withdraw those.

1	Q. Can you do that in advance of the
2	plan? Can you do that while you are formulating the
3	plan?
4	A. Withdrawls?
5	Q. Yes?
6	A. Yes, there is a
7	Q. So does the planner know all the
8	inoperable areas and the uneconomic areas?
9	A. No, we doesn't.
10	Q. And this is despite the fact that
11	Industry has assured us that they have lots of local
12	knowledge?
13	MR. CASSIDY: Well, I don't think the
14	Industry is taking that position. That's really not a
15	fair question.
16	MR. LINDGREN: Well, it is a fair
17	question.
18	MR. CASSIDY: It sounded like an
19	editorial comment. He has not heard all the Industry's
20	case and what we are talking about - and you are going
21	to hear it in our planning panel - is a very straight
22	forward proposition to deal with increases to the
23	database and I don't think that even the tone is
24	unfair.
25	MR. LINDGREN: Well. Mr. Cassidy, with

1	respect, the comment did derive totally from a
2	statement found in the witness statement, page 37, the
3	second paragraph:
4	"Industry has conducted timber management
5	activities in various management units
6	within the area of the undertaking for
7	many years and many companies have
8	accumulated detailed stand data for those
9	units."
10	Again, during his oral testimony this
11	morning Mr. Saltarelli indicated that the managers know
12	these units because they've worked on them for years
13	and now he is telling me that there are many situations
14	or in some situations the managers lack the basic
15	information about the presence of inoperable or
16	non-economic areas.
17	MR. CASSIDY: No.
18	MR. LINDGREN: Q. If that is the case,
19	sir - I think it is a fair question - if that is the
20	case, how can the public be assured that Industry is
21	practising site specific forestry when it lacks
22	database information?
23	MR. SALTARELLI: A. I don't see a
24	problem with that. I guess it depends on the severity
25	of the ignorance. If the forest manager is ignorant

about a large percentage of his land base, I think the public has a real good reason to be skeptical, but I don't see it as a problem.

For one thing, I will remind you that we practise timber management activities on specific areas and we undertake to learn as much about those specific areas before we undertake our management plans and activities. The previous pages that you referred to, which spoke to OWOSFOP and the interrogatory No. 2, was speaking to regulation which is over the entire forest.

So we have very good knowledge about the areas we intend to undertake specific treatments or preparations in, but across the entire land base we haven't got the same degree of knowledge. One thing, it's not necessary; another thing is we can acquire it at some great expense and great effort, but it is going to change.

That information is not going to be the same information five years down the road or ten years down the road because the resource dynamic is going to change, and that's what we are saying. We plan very careful on a site-specific basis and that may be five per cent of the management unit, that doesn't mean we have to have total knowledge of a hundred per cent per management unit.

1	Q. Well, let's return to first
2	principals here. I think you indicated at the very
3	outset of this conversation that leaving these areas in
4	will inflate the MAD calculation?
5	A. I think that you are confused about
6	regulation is, and that's quite all right because a lot
7	of people are and
8	Q. Well go ahead.
9	A. And regulation is based upon your
10	entire land base. It takes everything in your land
11	base and says: Based upon what you have out there,
12	this fairly basic description of what you have out
13	there, this is indicated as what you should look at
14	managing or depleting or what have you. That's what
15	regulation does. It looks at the whole picture and

So regulation is a very broad sort of tool, an indication of the direction in which a manager should go, but he takes that broad tool and he applies it on the ground and he applies all the constraints to it, he applies all the data he has collected for that

says: For this time frame you should look at an area

in this magnitude -- of this magnitude. From that

stage forward, the forest manager looks at specific

areas and that's when he starts getting down to the

very detailed planning.

16

17

18

19

20

21

22

23

24

1	area or needs to collect and he plans on a very site
2	specific basis; one is regulation and the other is
3	allocation, they are two separate things.
4	Q. Well, I may be confused about this
5	but I don't think so and I don't think Dr. Baskerville
6	is. Let's turn to page 15 of Exhibit 16 which is the
7	Baskerville Report.
8	A. If you would just bear with me, Mr.
9	Lindgren, for a second here.
10	MADAM CHAIR: Mr. Lindgren, will the
11	Board need Dr. Baskerville's Report?
12	MR. LINDGREN: Pardon me?
13	MADAM CHAIR: Will the Board need Dr.
14	Baskerville's Report? How long is the statement that
15	you are going to read?
16	MR. LINDGREN: I was just going to read
17	two quotations. I hadn't planned to use it, but I
18	think it is now necessary to do so.
19	MR. SALTARELLI: I have Exhibit 16 now.
20	MR. LINDGREN: Q. Okay. Can you first
21	turn to page 15?
22	MR. CASSIDY: Madam Chair, I may be able
23	to give you a copy of that
24	MADAM CHAIR: Thank you, Mr. Cassidy.

MR. CASSIDY: --if you can ignore the hen

1	scratches on he	ere. (handed)
2	M	MR. SALTARELLI: Yes, Mr. Lindgren, I'm
3	ready.	
4	M	MR. LINDGREN: Q. Okay. Under the
5	heading Determi	nation of Area and Rotation, Dr.
6	Baskerville wri	ites:
7	91	'In area regulation any actions that
8	Ċ	decrease rotation age or that increase
9	t	the area base have the effect of
10	i	increasing the allowable annual
11	Ó	depletion. The reverse is also true.
12	r	The credibility of an area approach
13	t	to regulation largely depends on how the
14	ē	area base and the rotation are set."
15	1	Now, I take it you would agree with those
16	principles?	
17	7	A. That's correct, yes.
18	. ۵	2. Now, turning to page 16, the last
19	full paragraph,	, it says the paragraph that starts
20	with:	
21	1	'One potential problem with the MAD base
22	i	is control lies in the handling of
23	1	reserves"
24	7	And part way through that paragraph
25	there is a sent	tence that starts:

1	"If reserve area that is allocated but
2	not harvested accumulates to an
3	appreciable size it will have the same
4	effect as inflating the land
5	base. In this circumstance, reserve
6	areas in all likelihood will not
7	remain in the MAD base and contribute to
8	the size of the allowable harvest area.
9	Since the harvest actually comes from
10	outside these areas, this necessarily
11	means that the latter area is
12	overharvested."
13	And he concludes:
14	"The retention of reserves in the MAD
15	base where there is no continue intention
16	to harvest these areas has the effect of
17	concentrating the harvest on a smaller
18	area. Areas that will not be
19	harvested for whatever reason should not
20	be in the MAD base", which brings me to
21	the question I put to you a few moments ago.
22	You indicated that managers or planners
23	do not know the location of inoperable or non-economic
24	sites or stands and yet they are left in the MAD
25	they are left in the MAD base and my question to you

1	Wag: Doognit this inst
	was: Doesn't this inflate the allowable cut
2	calculation?
3	A. Okay, I will qualify that first of
4	all. The timber manager may not know on a general
5	level where those areas are. He or she may, on the
6	other hand, identify a specific forest unit, for
7	example, he or she may say the spruce forest unit,
8	which is a very low site class spruce, is its own
9	forest unit for which its own MAD would be calculated.
10	If he or she does that, then he has or
11	she has the tests that have segregated that inoperable
12	criterion from his forest, he or she can operate or
13	manage accordingly.
14	Another thing to bear in mind is that
15	maximum allowable depletion does not equal harvest.
16	Maximum allowable depletion okay, if you are
17	familiar with that then I won't burden you with the
18	details.
19	I agree with Baskerville insofar as if
20	you can identify an area or a group of areas or what
21	have you that for any reason will not be harvested,
22	then it makes sense to withdraw those areas from the
23	the MAD land base. Again, I would qualify it by saying
24	the intended use for that area may change in future.
□ 1	V., V

Again, regulation looks at long term as

1	well as short term. So, yes, it should be removed if
2	it's not going to be harvested at all, it would make
3	good sense to remove it, but if the use for that area
4	may change then it may not make good sense to remove
5	it.
6	Q. Let's conclude my reference to
7	Baskerville by turning to page 21 of the document.
8	A. Yes, sir.
9	Q. And in the top paragraph, the
10	sentence begins:
11	"A further issue here is the allocation
12	of areas of forest that are not
13	harvestable either by reason of site or
14	inoperability. Although this is a matter
15	of what should be in the MAD base, such
16	an allocation is not a realistic
17	reflection of what will actually be done
18	in the forest. Allocation of area
19	that will not be harvested leaves the
20	plans as somewhat theoretical notions
21	rather than working documents used to
22	guide an actual change in the forest."

23

24

25

point?

I take it that you would agree with Baskerville on that

Now, in light of your most recent answer,

1	A. I agree with it just from my limited
2	understanding of the context. If you wouldn't mind I
3	would like to read the entire section here.
4	MADAM CHAIR: Excuse me, Mr. Lindgren,
5	are you going to be finished at five?
6	MR. LINDGREN: Mr. Cassidy just posed
7	that very question to me.
8	MADAM CHAIR: We know, we heard him.
9	MR. LINDGREN: It is taking me a little
LO	more time than I anticipated. I may be very close to
11	finishing at five o'clock, but I might need 10 or 20
12	minutes tomorrow morning.
13	Q. Mr. Saltarelli, have you refreshed
14	your memory as to what Baskerville said on this issue?
15	MR. SALTARELLI: Just about, sir, just
16	give me another minute.
17	MR. CASSIDY: I didn't realize my voice
18	carried so much.
19	MADAM CHAIR: You were whispering
20	actually.
21	MR. SALTARELLI: So the question is, if I
22	may clarify it: Do I agree with Dr. Baskerville's
23	statement that:
24	"allocation of the area that is not to
25	be harvested leaves the plans as somewhat

1	theoretical notions rather than working
2	documents"
3	Is that right?
4	Q. That's correct.
5	A. I agree with Dr. Baskerville in that
6	respect.
7	Q. Okay. And the point being that if
8	the inoperable areas or non-economic areas are not
9	identified in advance and are not removed from the land
.0	base, then the MAD calculation will be inflated?
1	A. If you equate MAD with depletion. If
.2	you had to allocate - and I believe this is somewhat
13	theoretical - one could get the notion by looking at an
. 4	allocation map that an area around the lake might be
.5	part of an allocation, but we know that it's not going
. 6	to be harvested because there is a shoreline reserve
7	around that lake.
.8	In essence, that reserve becomes part of
.9	the allocations. It's not going to be harvested but
20	it's still part of the allocation, the maximum
21	allowable depletion allocation. I believe that yes,
22	there is a good possibility for a misunderstanding of
23	what allocation means; what's allocated for harvesting
24	and what isn't, but it's qualified.

Q. Well, again, I think the question was

1	simply this: Does leaving in those areas inflate the
2	the MAD or not?
3	A. I'm afraid the question is not that
4	easily answered and I am doing a poor job explaining it
5	to you and I apologize.
6	It inflates the MAD insofar as if you
7	equate the MAD with actual physical depletion
8	Q. Sorry to interrupt, but I am just
9	concerned about the MAD. Let's leave depletion for the
.0	moment. We will turn to that, I assure you.
.1	A. Well, MAD is the maximum allowable
. 2	depletion. It is the same thing.
. 3	Q. Versus the actual cut. I thought
. 4	that was the distinction that you gave me.
.5	MR. CASSIDY: Madam Chair, the witness is
.6	trying to be as helpful as possible, he has already
17	indicated that. I think he should be given the
. 8	opportunity to be helpful.
.9	MADAM CHAIR: Yes. Proceed, Mr.
20	Saltarelli.
21	MR. SALTARELLI: Thank you, Madam Chair.
22	What I'm saying, Mr. Lindgren, is that there is a
23	possibility here that the MAD can be misinterpreted as
24	equal to harvest area and I don't think that's the
25	case.

Now, bear with me, please. If one allocates an entire land base including reserves and operable areas, what regulates on that land base, he is going to get -- he or she is going to get a number that says that is the maximum allowable depletion. He or she will allocate that number on the stand maps.

4 5

What I'm trying to say is that deductions from that number will take place in inoperable areas and areas for which there are other reasons that timber management is contemplated for that particular area.

I also believe, I said before, if a manager can identify those areas for which he or she knows unequivocally that timber management will never be part of the strategy for that area, then that area should be removed from the land base because it inflates it.

- Q. Would you agree with me then that the manager should undertake his best efforts to determine these areas in advance so they are in fact removed prior to the MAD calculation?
- A. We addressed that in our planning evidence and I think we are really getting into the planning aspect of this very heavily, and we support the notion of I don't use the word notion in the derogatory sense we support the need for a values map

1	or a values inventory of some kind to enter into your
2	resource inventory and that could be certainly part of
3	the process, identifying those values on a
4	site-specific basis.
5	And I really think, Mr. Lindgren, you
6	would be better off addressing those questions to our
7	planning panel because they can answer it far better
8	than I can, because you are getting away from the
9	allocation question now with which I am most familiar.
10	Q. Well, I am not sure I agree with you,
11	sir. I think we are discussing the very determination
12	of allocation and I think that is a crucial and
13	critical issue that this wood supply panel should be
14	addressing and, in fact, you have been addressing it to
15	some extent.
16	Now, if I could just confirm - and again,
17	if I understand you correctly - you have indicated that
18	in certain circumstances leaving these areas in will
19	inflate the MAD calculation?
20	A. That is correct.
21	Q. Now, that's just merely leaving them
22	in; that is just their mere physical inclusion in the
23	land base?
24	A. It's not really physical, it's a
2.5	number.

1	Q. It's a number, okay.
2	A. The number is bigger than it should
3	be.
4	Q. Would you agree with me that it's
5	conceivable that many of these inoperable or
6	non-economic areas may also contain older stands?
7	A. I don't quite follow your logic.
8	Could you explain that, please?
9	Q. These sites that are determined one
10	way or the other to be non-economic or inoperable may
11	in fact contain older age classes?
12	A. I think it's equally probable that
13	they will contain mature age classes, young age
14	classes, whatever, and a lot of it has to do with
15	proximity, not so much with the age of the stand.
16	Q. Okay. But I think I asked my
17	question: It's conceivable that it could include older
18	stands?
19	A. And my answer is that, yes, as well
20	as younger stands or any other age of stands.
21	Q. Okay. Now, in light of that answer
22	and as a general proposition, would you agree with me
23	that if the stands are older the inclusion of these
24	inoperable or uneconomic areas may in fact inflate any
25	accelerated cut that may be determined for this area?

1	A. Absolutely, by virtue of the fact
2	that average age regulation weights the maximum
3	allowable depletion according to the age and area
4	relationship.
5	Q. I take it that you are aware that Dr.
6	Baskerville raised some concerns about the accelerated
7	cut?
8	A. Yes, I believe he did.
9	Q. I am referring particularly to page
10	19 of his report.
11	A. Can you tell me what line
12	specifically so I can
13	Q. I am looking at the last two lines of
14	the last paragraph where Dr. Baskerville indicates
15	that:
16	"Acceleration creates more area of young
17	stands than should be created with the
18	result that the age class becomes
19	allocable for harvest in "r" years, will
20	have too much area in it leading to
21	further acceleration. The rationale for
22	use of accelerated harvesting in the OMNR
23	is not clear."
24	Then continuing onto the next page,
25	second line:

"Because acceleration is intentional
short-term overharvesting it also means
that there must be a decrease in both the
area depleted and the volume generated
by that depletion over time."
And then skipping the next line:
"It is not clear why acceleration is
mandated in the OMNR when it is clear
that there are insufficient markets
to absorb the volume generated by
harvesting the additional area."
And then skipping down to the second last
line Dr. Baskerville concludes:
"Acceleration as mandated in current
planning is not based on sound biological
and economic principles."
Do you agree with all of those statements
that I have just read into the record?
A. I agree, but I will qualify it; that
is that at the time Dr. Baskerville wrote this report
this was the major concern of many of us in forestry
but the Ministry - and I think I may have to ask a
representative of the Ministry to qualify this for me -
representative of the Ministry to qualify this for me - I think the Ministry has abandoned or at least tempered

1	acceleration, more or less taking regulation modeling
2	on a space value and just accelerating. I think that
3	is no longer the means of management in Ontario.
4	Q. Is it your understanding then that
5	accelerated harvest no longer occurs anywhere
6	throughout the area of the undertaking?
7	A. No, I didn't say that. There is some
8	very good reasons to undertake accelerated harvesting.
9	I can think of specific examples where the age class
10	distribution of a given species is such that the
11	options are harvest it and utilize it or let it fall
12	down.
13	So obviously if you are going to harvest
14	it and utilize it, as it's a sizeable area, it may
15	require some accelerated harvesting and, in that case,
16	it seems to me to be a logical management decision to
17	accelerate that harvest. It's just a sensible thing to
18	do from a timber supply standpoint.
19	So the answer is, no, accelerated
20	harvesting I am sure is happening.
21	Q. I will return to that in a moment,
22	Mr. Saltarelli. I would just like to finish off
23	Question No. 2 or Interrogatory No. 2 from Forests
24	for Tomorrow.
25	And as I mentioned earlier, the last line

1	indicates that inoperable or non-economic areas may be
2	or may include stands with poor access or marginal
3	operability and those areas for which use other than
4	timber production may be contemplated.
5	Now, could those latter areas become
6	areas of concern?
7	A. Areas of concern. I think they could
8	be by virtue of the fact that virtually any area,
9	regardless of how you qualify it, could become an area
10	of concern depending on what the concern is.
11	Areas of poor access aren't necessarily
12	areas of concern, they could be if they represent some
13	sort of other value that has nothing to do with access,
14	for example. Marginal operabilty quite possibly, there
15	could be another use contemplated for that area. That
16	has nothing to do with operabilty, but it has another
17	perhaps value that has to be protected.
18	Q. Well, I am speaking more specifically
19	of the latter category of areas that is referred to the
20	answer and that is areas for which use other than
21	timber production production may be contemplated.
22	A. Okay.
23	Q. Go ahead.
24	A. Essentially what I was about to say
25	is that it depends on the time frame. If that area is

1	special, if for example it has some cultural value
2	there is a burial mound or a dog effigy or something in
3	that area and there is no way it should ever be
4	harvested, then that's a feature that defines that area
5	as more or less away from the timber management
6	planning sort of influence.
7	But if I allude back to a certain age
8	class of poplar that may be needed to sustain a beaver
9	population. There are other examples I am sure but
10	that one seems the most easy to understand.
11	Beaver like young poplar and once they
12	get to a certain age they leave because the poplar is
13	too old, they won't cut it down any more, and obviously
14	if that is the purpose for which that stand is
15	intended, to support beaver populations, then that is
16	going to change. In other words, within a few years

So what I am saying is the key word there is may be contemplated as timely, it depends on what time frame you are looking at; permanent, temporary, or possibly temporary time limit.

time perhaps we can harvest that stand because the

beaver have left.

17

18

19

20

21

22

23

24

25

Q. Let me make this suggestion, Mr. Saltarelli, and you can indicate whether you agree or disagree.

1	But I interpret that answer as indicating
2	that these other uses are more or less decided by
3	default, the decision or the determination has been
4	made that: Well, we can't cut it, so we will just
5	leave it for some other use. Is that a fair
6	interpretation of that answer?
7	A. Are you saying that industry can
8	decide what the other uses are?
9	Q. No. I am asking: Is that how you
10	have indicated such areas could become AOCs and I am
11	wondering, do they become AOCs by default?
12	A. No.
13	MADAM CHAIR: Mr. Lindgren, haven't we
14	heard evidence from the Ministry that areas of concern
15	are developed to protect other values.
16	Are you saying that because there is a
17	surplus an area that is part of a surplus
18	calculation wouldn't be an area of concern?
19	MR. LINDGREN: No, in particular I am
20	interested in these inoperable and non-economic areas,
21	and if I interpret this answer in the latter part of
22	this answer correctly - I am not sure I am, and that's
23	why I am asking, Mr. Saltarelli.
24	The primary determination is: Can we cut
25	it, is it operable or is it economic; if it's not, then

1	maybe it will become an AOC.
2	MADAM CHAIR: The primary determination
3	is can we cut and does the Ministry of Natural
4	Resources have some other purpose for this land that
5	has to be protected.
6	MR. LINDGREN: That is what I am trying
7	to elicit from the witness.
8	MR. CASSIDY: I have some problem with
9	this because I think - we can hear from the witness -
10	but I think the evidence is clear that the industry
11	doesn't make the determination of where you harvest.
12	I think for the past number of months we
13	have been hearing that decision rests with the
1.4	Ministry. So I think this question may in fact not be
15	properly put to these witnesses because we have already
16	heard evidence that my clients don't make that
17	decision.
18	MR. LINDGREN: Q. Very well. But let me
19	ask you this - I think this is a question that I
20	believe the industry should be in a position to
21	answer - how many of these inoperable or non-economic
22	areas are left for other uses? What type of area, what
23	size of area are we talking about?
24	MR. SALTARELLI: A. The easy answer to
25	that question is I don't know, because it's so

1	variable. I understand
2	MADAM CHAIR: Could you give us an
3	example, just maybe one or two examples from the
4	Iroquois Forest, Mr. Saltarelli, where there would have
5	been an inoperable area.
6	MR. SALTARELLI: An inoperable area that
7	became an area of concern or just inoperable area?
8	MADAM CHAIR: I don't understand Mr.
9	Lindgren's question. Are you just saying an inoperable
10	area generally?
11	MR. SALTARELLI: Let me give you an
12	example of an inoperable area. For example, an area of
13	black spruce which is site class 2, therefore part of a
14	productive land base which has begun to deteriorate for
15	one reason or the other and it's falling down, such
16	that the volumes are not economic to recover or perhaps
17	dangerous to go in there because the trees are lying
18	all over the ground and people might get hurt. That
19	could be an inoperable area. I suggest that is one
20	example.
21	MR. LINDGREN: Q. I think I might be
22	able to state my concern in the following way. Of the
23	areas that are unsuitable for harvesting, how many are
24	left because they are inoperable and uneconomic, and
25	how many are left because of the presence or potential

1	for other uses	3?	
2		Are	you in a position to answer that.
3		MR.	SALTARELLI: A. I think I am
4	beginning to u	ındeı	estand your question. I think - now
5	let me try to	repl	nrase it for you. How many areas are
6	inoperable bed	cause	e there is another use intended for
7	it, is that pa	art o	of your question?
8		Q.	That wasn't the way I phrased it.
9		A.	Okay.
10		Q.	We have areas that are unsuitable for
11	harvest.		
12		Α.	Okay, for one reason or the other.
13		Q.	They are bypassed.
14		Α.	Okay.
14 15			Okay. How many are bypassed by reason of
	inoperability	Q.	
15		Q.	How many are bypassed by reason of
15 16		Q. and	How many are bypassed by reason of uneconomic nature of the stand, how
15 16 17	many are bypas	Q. and ssed	How many are bypassed by reason of uneconomic nature of the stand, how
15 16 17	many are bypas for that area?	Q. and ssed	How many are bypassed by reason of uneconomic nature of the stand, how because other uses are contemplated
15 16 17 18	many are bypas for that area? speaking of sh	Q. and ssed?	How many are bypassed by reason of uneconomic nature of the stand, how because other uses are contemplated It's difficult to quantify. You are
15 16 17 18 19	many are bypas for that area? speaking of share not harves	Q. and ssed? A. nore sted	How many are bypassed by reason of uneconomic nature of the stand, how because other uses are contemplated It's difficult to quantify. You are reserves, for example. Those areas
15 16 17 18 19 20	many are bypas for that area? speaking of share not harves	Q. and ssed? A. nore sted. Is	How many are bypassed by reason of uneconomic nature of the stand, how because other uses are contemplated It's difficult to quantify. You are reserves, for example. Those areas because there is another use intended
15 16 17 18 19 20 21	many are bypas for that areas speaking of sh are not harves for that areas	Q. and ssed? A. nore sted. Is	How many are bypassed by reason of uneconomic nature of the stand, how because other uses are contemplated It's difficult to quantify. You are reserves, for example. Those areas because there is another use intended that what you mean?

1	cent of the area that are reserves or so-called
2	zone-outs, yeah.
3	MADAM CHAIR: And that includes the
4	inoperable areas as well?
5	MR. SALTARELLI: Well, no, they are not
6	inoperable. I think the question was how many areas
7	are bypassed because they're an area of concern or they
8	have some other use other than timber harvesting. That
9	is not inoperable.
10	MR. CASSIDY: Mr. Freidin has pointed out
11	that he was in Toronto last week at Industry's Panel 2
12	and there was evidence about percentages being zoned
13	out. I don't know if that is of any help to the Board.
14	I thank Mr. Freidin for bringing that to my attention.
15	MR. MARTEL: I am not sure that is the
16	question Mr. Lindgren is trying to get at.
17	MADAM CHAIR: What was your question
18	again, Mr. Lindgren? We obviously aren't
19	understanding.
20	MR. LINDGREN: I think we all are. There
21	are areas we are told that are unsuitable for
22	harvesting. The interrogatory indicates that some of
23	those areas are stands with poor access and inoperable,
24	it's uneconomic to cut, so they are left, and it also
25	includes areas for which a use other than timber

1	production may be contemplated.
2	MR. SALTARELLI: No, that's not
3	inoperability now.
4	MR. LINDGREN: Q. No, I know. That is a
5	separate and distinct question from inoperability.
6	MADAM CHAIR: So the latter are reserve
7	areas.
8	MR. LINDGREN: Well, they might not
9	necessarily be formal reserves or even AOCs, correct?
10	MR. SALTARELLI: A. Which are you
11	speaking of, the inoperable?
12	MR. MARTEL: Didn't we start out, I think
13	way back, that once you got to that section those areas
14	for which a use other than timber production may be
15	contemplated you asked if they could become AOCs.
16	MR. LINDGREN: That's right, and I
17	believe well, the answer was
18	MR. SALTARELLI: Quite possibly.
19	MR. LINDGREN: Possibly.
20	MR. SALTARELLI: Yes.
21	MR. LINDGREN: Not necessarily all these
22	areas that are found within the production forest will
23	become an AOC or a formal reserve where no cutting will
24	occur.
25	Q. I will just end it this way, I will

pose the question as basically as I can. Of the area
that is bypassed how much is bypassed for reasons of
economics and inoperability, and how much is bypassed
for reasons relating to the potential for other uses?

MR. SALTARELLI: A. All right. That is

MR. SALTARELLI: A. All right. That is very clear and the answer to that is that it varies, it changes in the different circumstances.

If in the five-year term there are very few waterbodies, there are very few tourist outfitters or canoe routes or heronries or what have you, then the area of bypass for other uses is going to be quite small.

The converse is true whereby if management planning takes place in an area that is sensitive to tourism values or wildlife values and so on and other uses have been prescribed for different parts of that area, the bypass area for that reason is going to be correspondingly large.

If a company is operating in an area that has a large expanse of fire origin jack pine stands, for example, generally speaking that is going to be a very homogenous forest and there is going to be very little area that is bypassed because of inoperability.

On the other hand, if a company is operating in a forest that has a whole wide array of

1	cover types, mixture of old black spruce and old jack
2	pine and young wood and perhaps a species that
3	particular operator doesn't use, then there is going to
4	be a correspondingly large area of bypass because of
5	inoperability.
6	It's not something unfortunately that you
7	can put a label on and say it's 15 per cent or it's 20
8	per cent, and I don't want to be obtuse about this, but
9	that unfortunately is the answer to that question.
10	Q. Okay. Just to follow up on that
11	point. Because you can't determine with any precision
12	the extent of these areas, you in effect or your
13	ability to determine the surplus is adversely affected?
14	A. Okay. I was speaking to, giving you
15	a general range of percentages and so on, but I would

a general range of percentages and so on, but I would harken back to the site specificity where there is - that's a tough one and it's a quarter to five - to the site-specific nature or area-specific nature of the timber management planning.

I think that if you are looking at that particular area you are going to have a pretty good handle, probably an excellent handle on those areas that are going to be bypassed and those areas that are going to be set aside for uses other than timber management.

1	0.	Do you	know	that	in	advance?
·	X. "					

A. Yes, I would say so. Some of it might or could come up at the public information sessions and it's quite possible someone from the public could say: Gee, there is this lake over here and I know there is speckled trout in that lake and they are showing a reserve that is whatever, I am being arbitrary, that's only 30 metres and it should be 60, it's quite possible we will learn something. We are not omnipotent, we don't know everything. It can come up.

Again our planning panel deals with that, with the different advisory committees we would like to establish for the different uses so we can establish ahead of time where these special areas are.

- Q. Well, I think you have indicated that the managers will not know the location of all the inoperable and non-economic areas, and if that is the case -- if that is the case, then you don't know the true or real production land base and, as a result, you can't, in a meaningful way, calculate the sustainable allowable cut?
- A. I guess it really comes down to, I know it comes down to how serious a problem is that. If wood supply is really tight and the manager has to

1	estimate his or her wood supply within 10 or 15 per
2	cent and he doesn't know, he or she doesn't know where
3	all these different areas are, then you are right,
4	that's a problem.
5	But if there is a fair bit of slack in
6	
7	the system, such that it doesn't matter if he's 20 per
	cent out or she's 30 per cent out or what have you,
8	then the problem becomes less critical. I think you
9	would agree with me there.
10	Q. I am asking the questions, I don't
11	supply answers.
12	MR. CASSIDY: Thank you.
13	Q. A few moments ago we were speaking of
14	the accelerated cuts and accelerated harvest and the
15	principle of cutting the oldest first which you did
16	you indicate that you believe that to no longer be the
17	operative principle?
18	A. I believe that is the case, that
19	oldest first is no longer mandated by MNR.
20	MR. CASSIDY: And there was evidence on
21	this, page 39 of our witness statement refers to some
22	transcript reference for the Board's convenience.
23	MR. LINDGREN: Q. Could I ask you to
24	turn to page 40, the next page.
25	MR. SALTARELLI: A. Yes.

1	Q. Now, the third full paragraph, second
2	line indicates that:
3	"However, the principle of liquidating
4	forest stands on the basis of
5	chronological age disregards the
6	realities of biological age and stands
7	actually allocated as part of an
8	accelerated harvest are not necessarily
9	those from the oldest age class."
.0	And I think that is what you are getting
.1	at?
.2	A. Yes, I am.
.3	Q. Now, you may recall that we posed an
. 4	interrogatory on that very statement. This is question
.5	No. 3 in Exhibit 1094, and essentially we asked: What
.6	is meant by the statement "disregards the realities
.7	of biological age?"
. 8	If I could speed things up by
.9	paraphrasing the answer. The answer basically
0	indicates that different species mature at different
1	rates on different sites, and the difference in sites
22	will also have an effect on the tree's health and
13	vitality. Is that a fair summary?
34	A. Yes, in the same species. Also age
15	differs in different sites.

1	Q. That's right, but there are other
2	factors that affect the rate of growth and vitality and
3	maturity?
4	A. Oh, certainly. The sites probably,
5	climate of course but if it's climate it affects the
6	entire forest. Climatic change really doesn't occur
7	over very narrow degrees of latitude - I am not a
8	climatologist and I haven't been qualified as an
9	expert - but I know that generally the climate in a
10	management unit is pretty well uniform.
11	Q. Including micro-climate?
12	A. No, micro-climates are different,
13	there are frost pockets and so on.
14	Q. Okay, thank you. Now, I think the
15	statement on page 40 indicates that it's difficult to
16	regulate the forest on the basis of chronological age,
17	but can you confirm for me that it's nevertheless
18	possible to run OWOSFOP for different or run separately
19	for site classes?
20	A. Yes, it comes down to how one defines
21	a management unit or a forest unit, I am sorry. In
22	other words, you can say your forest unit is a certain
23	site class and a certain species and you can break down
24	on the OWOSFOP database according to those criterion.
25	The outputs become a little more

complicated to interpret and become a little more complicated to disaggregate and apply on the spacial basis once you get back to ledgers and maps, but it's quite possible.

- Q. And can you in fact confirm that this is now being done in some management units where the working group has been subdivided by soil type or site class and a separate allowable cut has been calculated?
 - A. That's correct.
 - Q. Now, how prevalent is that?
- A. It's quite common actually, it's common in the Iroquois Falls Forest, for example, because our area -- our land base area is approximately 80 per cent black spruce, it is prudent to subdivide that area into basic site classes. So we have a forest unit that is site class X1, for example; a forest unit that is site class 2, which is kind of average, and a forest unit that is site class 3.

However, dealing with that particular segregation the biological age of black spruce is going to differ. There could be some site class 2 black spruce that is again, for example, a hundred and whatever, 20 years of age that is starting to fall apart, the stand is starting to break up and there can be another site class 2 black spruce stand which is

1	part of that forest unit that is quite a bit older than
2	that and still growing.
3	So even using the site class designation
4	as a dividing line between forest units, there is still
5	the possibility that chronological age and rotation age
6	or, sorry, biological age may not be the same.
7	Q. Well, would you agree with me that in
8	general for most working groups the rotation age is in
9	fact the same?
10	A. Rotation. I am sorry, I don't catch.
.1	The rotation age is the same.
12	Q. One rotation age is set, correct, for
.3	the species?
	A. For the forest unit, yes.
.5	Q. For the forest unit. And how large
16	is the forest unit?
7	A. It can vary. It will vary from
18	management unit to management unit. In fact there is
19	no there is no set limit size for a forest unit.
20	As a matter of fact there are some forest
21	units that are very tiny. I can think of a licence
22	that we once held that had exactly 40 hectares of white
23	pine on it and that was the whole forest unit.
24	But I can also think of the Iroquois
25	Falls Forest that has 80 per cent black spruce and we

1	split it up into three categories but half of that
2	category or 40 per cent of the land base is black
3	spruce site class 2, so that's amassive forest unit.
4	There is no set limit, no set size.
5	Q. And within a forest unit there could
6	be different site classes obviously?
7	A. There can be. If your forest unit is
8	called black spruce, that means to me that it has all
9	the site classes in it. If it's called black spruce 2,
10	it has one site class - and, again, site class is a
11	feature of FRI, it doesn't reflect what the site is,
12	and we are getting into some confusing territory here -
13	but FRI does not pretend to address site, I guess a
14	site class which is based upon measure of height over
15	age.
16	Q. Well, my concern here, Mr.
17	Saltarelli, is this: I think you agreed that in
18	general a single rotation age is set for a forest unit?
19	A. As a matter of convenience, yes.
20	Q. As a matter of convenience. And yet
21	you also indicated the forest unit could in fact have a
22	variety of site classes within it.
23	If that is the case, the rotation age
24	that is set, the single rotation age that is set does

not reflect the maturity of the stands at harvest

1	otherwise within that forest unit because otherwise
2	you would have different rotation ages set for each
3	working group to reflect the site-specific nature of
4	the stands?
5	A. Okay. You are absolutely correct and
6	the key word there is 'site specific'. There are
7	different sites within site classes and this is one of
8	the reasons why HSG is a valuable tool because it looks
9	at all the stands that that FRI calls a certain site
10	class and can estimate, based upon the expert rule
11	system that I've discussed, what the site - it's a very
12	rudimentary thing now, it is going to expand and
13	improve in the future - but it can estimate for that
14	stand what the site is and it can estimate what the
15	biological rotation age of that stand might be or when
16	it might conceivably fall down.
17	Q. If the rotation ages do not generally
18	reflect the various stages of maturity that could be
19	expected of these various site classes, I think you
20	would agree with me then that the current regulation or
21	management of the forest is not site specific?
22	A. It's not site specific, that's
23	absolutely correct, from the standpoint of a
24	silvicultural site.
25	Q. Returning to FFT interrogatory No. 3

1	in question 3	(b) we had asked:
2		"In what way are stands actually
3		allocated for accelerated harvest not
4		within the oldest age class?"
5		And the answer indicates that:
6		"Allocation is in fact affected by
7		spacial realities. Old stands may occur
8		in the proximity of young stands and
9		the young stands may be taken at that
10		time."
11		Would you agree with me that that
12	allocation or	the harvest of the younger trees is
13	simply a matte	er of economics?
14		I mean, if your harvest is occurring in
15	the area, the	younger trees are there and for take. Is
16	it a matter of	f economics?
17		A. It's a matter of economics, yes.
18		Q. Now, in question 3(c) we asked:
19		"What percentage of the annual harvest
20		does not occur within the oldest age
21		classes?"
22		And the answer indicates that:
23		"This varies from management unit to
24		management unit."
25		This is fair enough but, again, we're

1	asking for some actual examples of this variation.
2	What kind of range are we talking about?
3	A. I can give you an example, again, in
4	the Iroquois Falls Forest because that's the plan I am
5	most familiar with. I'd be guessing, but it could be
6	as much as 25 per cent of the allocation is not in the
7	oldest age classes.
8	Again, that number is off the top of my
9	head. I happen to know from running OWOSFOP, FORMAN
.0	and HSG that we concentrated our areas in our heaviest
.1	concentration of oldest age classes. That's doesn't
. 2	mean that everything we cut is going to be part of the
. 3	oldest age class.
. 4	Q. Now, that figure of 25 per cent,
.5	again you're not in a position to indicate if that's
.6	typical across management unit to management unit?
.7	A. No, I'm not, sorry.
. 8	Q. Is that the upper end of the
.9	variation or is it possible to have an even greater
20	variation?
21	A. I can't answer that either, I'm
22	sorry. Perhaps you could ask that of the planning
23	panel.
24	Q. Could I ask you to return to page 40
25	in the witness statement. Then continuing in the third

1	paragraph where I left off there is a statement that:
2	"Acceleration of harvest cannot be
3	rationalized in the absence of
4	accelerated renewal efforts or in the
5	absence of long-term wood supply
6	considerations."
7	Are you saying, Mr. Saltarelli, that
8	accelerated harvest should not occur without
9	accelerated renewal?
10	A. No, I'm not saying that.
11	Q. What does that statement mean then?
12	A. What I'm saying is you have to
13	consider There can being very good reasons for
14	accelerated harvest that have nothing to do with
15	renewal, and you have to go back to the entire
16	paragraph that states that:
17	"Part of an area of an accelerated
18	harvest may have no relationship to
19	oldest age classes that may be
20	declining."
21	They could include some prime sites, for
22	example. In that case, I believe that if you are going
23	to accelerate prime sites that form a very important
24	strategic land base for the future, then you should be
25	prepared to expend some money in those areas and renew

1 them.

If you have the alternative of letting a stand fall down and perhaps become a balsam fir stand whereas now it is now a jack pine or a spruce stand or cutting it and still letting it become a balsam fir stand, then obviously the option there is to harvest it.

In other words, if you don't harvest it and it falls down and it becomes a stand that you consider to be less than desirable, then I guess you've lost some land base or lost some desirable land base.

If you harvest it and it becomes a stand that becomes less desirable, then you've lost some land base.

In either case, the situation in which you harvest it you gain something on the situation, whereas in the other, where you leave it to fall down, you gain nothing and this is why I qualified that statement.

You have to look at long term wood supply. If you can carry it forward on the stump and you haven't got money to harvest it or haven't got money to regenerate it, perhaps you should carry forward on the stump in the future. I think you're going to need it. If it's part of your prime land base, perhaps you should look at spending some money

1	and reforesting it.
2	Q. Well, the statement reads:
3	"Acceleration of harvest cannot be
4	rationalized in the absence of
5	accelerated renewal effort."
6	Aren't you saying that acceleration of
7	harvest shouldn't occur unless and until accelerated
8	renewal efforts are undertaken?
9	MR. CASSIDY: The statement also says:
.0	"in the absence of long-term wood
.1	supply considerations."
.2	MR. LINDGREN: My question is directed to
. 3	the first portion of his statement and I am attempting
4	to clarify what is meant.
.5	MR. SALTARELLI: All right. Let me try
.6	to explain it this way. One has to first of all,
.7	renewal efforts are designed for one thing as far as
. 8	timber management planning is concerned and that's to
.9	supply a future timber supply. So you can't really
0.0	divorce renewal efforts from long term wood supply and
21	considerations; the two go hand in hand.
22	What I'm saying there is, you have to be
23	able to rationalize an accelerated harvest. It has to
24	be managerially sound. You can't do that unless you
25	look at the impacts of that accelerated harvest on your

1 future	wood	supply.
----------	------	---------

MR. LINDGREN: Q. Okay. Then are you saying, you can accelerate the harvest but you don't necessarily have to accelerate the renewal efforts?

MR. SALTARELLI: A. It's quite possible depending on the circumstances. Again, I would cite that circumstance that I pointed out where no matter what you do from the harvesting standpoint you are going to end up with essentially the same situation. You haven't got the money to go back and renew that stand, so on that basis you leave the stand alone, it falls down and you get an undesirable stand coming back or you can go and you can harvest that stand instead of letting it fall down and you can get an undesirable situation coming back.

The end result is the same, but at least you derive some benefit from harvesting that stand.

This statement was not meant to be a blanket statement saying, if you can't regenerate that area that's part of accelerated harvest in every case, then shouldn't harvest it. That wasn't the point, but I can see why you are confused and I should have worded it better, I admit that.

Q. Okay. If I can just finish off by attempting to summarize what you have just said. The

1	mere fact that you can't regenerate an area does not
2	preclude you from cutting that area?
3	A. That is correct.
4	MR. LINDGREN: I think we will have to
5	revisit this discussion tomorrow morning, Madam Chair,
6	I have a bit more to go.
7	This might be an appropriate time for the
8	break if you wanted to break at five o'clock.
9	MADAM CHAIR: And how much will you have
10	tomorrow, Mr. Lindgren?
11	MR. LINDGREN: I would say a good 30
12	minutes.
13	MADAM CHAIR: All right. And how long
14	will you be, Ms. Harvie?
15	MS. HARVIE: I expect only between an
16	hour and two hours, although two hours is unlikely.
17	MADAM CHAIR: Mr. Freidin?
18	MR. FREIDIN: Two hours.
19	MADAM CHAIR: Yes, Mr. Cassidy?
20	MR. CASSIDY: Well, if you are asking me
21	how long I will be in re-examination, at the moment I
22	am about 15 minutes.
23	MADAM CHAIR: All right. Well, I think
24	that we can finish tomorrow then by the sounds of it if
25	we start at 8:00, or would you rather take

1	MR. CASSIDY: I suspect we could finish
2	if we started at 9:00. We can sit late tonight, Madam
3	Chair, if the witnesses are up to it.
4	Discussion off the record
5	(Panel withdraws)
6	MADAM CHAIR: We are going to have the
7	satellite discussion now.
8	MR. CASSIDY: Oh, all right.
9	MADAM CHAIR: I think we will start
10	tomorrow morning then.
11	MR. LINDGREN: At which time?
12	MADAM CHAIR: Eight o'clock.
13	MR. CASSIDY: We will be here.
14	MR. LINDGREN: I will be here as well.
15	MADAM CHAIR: Thank you.
16	Discussion off the record
17	MADAM CHAIR: Why don't we take a
18	20-minute break now and then come back and have the
19	satellite discussion.
20	MR. LINDGREN: Very well.
21	MADAM CHAIR: And also, what are the
22	other items on tonight? We received the report on the
23	negotiations.
24	Is someone speaking to that tonight? No,
25	okay. And are there any other issues we are supposed

1	to discuss?
2	MR. CASSIDY: The only other thing I
3	recall for today, Madam Chair, is that there is a
4	deadline for filing statements of issues. I have
5	received one from MOE. I assume that there are other
6	parties that wish to file or wish cross-examine with
7	respect to access and it is going to be difficult for
8	the scoping session tomorrow unless I get them tonight.
9	***THE HEARING LIAISON OFFICER: FFT's
10	came in about an hour ago, but I have a copy in my
11	office that you can have but you have to promise to
12	give it back to me.
13	MR. CASSIDY: Thank you.
14	MADAM CHAIR: Well, you have three now,
15	Mr. Cassidy.
16	MR. CASSIDY: All right. Tonight's work.
17	THE HEARING LIAISON OFFICER: And I
18	believe that's it, MOE, MNR and FFT.
19	MR. CASSIDY: Thank you, Madam Chair.
20	MADAM CHAIR: Thank you.
21	Recess taken at 5:05 p.m.
22	On resuming at 5:30 p.m.
23	MADAM CHAIR: Be seated, please.
24	Ms. Murphy?
25	MS. MURPHY: Yes. I am going to make a

1	few comments about the satellite hearing and
2	essentially just commence this, and then I understand
3	Mr. Lindgren has some specific submissions he would
4	like to make.

MADAM CHAIR: What we might do, Ms.

Murphy, is I might say a few words on the part of the Board before you begin and Mr. Lindgren starts.

Our impression of the Dryden hearing is that it went fairly well. We were quite satisfied with how things worked at that hearing generally. There are a few changes we would like to see, but essentially we thought the basic elements of it were very acceptable, we felt that the public was well served at the hearing in terms of being able to come before the Board and get the kind of information they wanted.

A few of the changes that we would like to see, and we will throw it out now before you speak to it. The first one is that we would want our liaison officer, Ms. Devaul, to be present at the open houses and we think there are obviously questions about the Board that she should be speaking to rather than leaving it to other parties, and those are very straightforward questions, about how we operate and how people address us and what to expect from us and that sort of thing. We would like to see that change.

1	We liked the idea that there was an open
2	house the night before and in the morning leading up to
3	the public session.
4	We received just a short time ago a
5	letter from Dr. Quinney in which he makes this
6	following suggestion:
7	"We would request that the multi-party
8	open house continue throughout the public
9	submission session. That is not and
10	prior to commencement of the satellite
11	hearings themselves, but rather continue
12	to run concurrently for the duration of
13	the public submissions."
14	We are of the opinion that we can't see
15	the purpose behind this and furthermore we would not
16	want the open house to be taking place at the same
17	time, we want people at the hearing itself.
18	The question of whether the open house
19	continues after the hearing is another one and you
20	might want to address that, but we can't see them
21	running concurrently.
22	We like the idea of having it a night

before and in the morning up to accommodate the public.

I think our concern before Dryden was that we wanted

people to only have to come once. So if they came near

23

24

25

1	the end	of the	open hou	se they	can s	tay	for	the	public
2	session,	they w	ouldn't	have to	make	two	trip	s.	

On the other hand, if there's a problem of scheduling working hours, they cold come the night before. So I think we would like to stick to that format.

We agree with Mr. Lindgren's suggestion that the public notice be made to read less legalistically. We think there must be a way that we can do that. We would be happy for the Ministry to draft some sort of notice that was less legalistic and we will be happy to look at that and offer our own comments on it.

I think this is being done with other boards and agencies. I read the papers and follow hearing notices, and I think there is an attempt being made. I know in our particular case a lot of information has to be crammed into a hearing notice in a limited space, but we would like to make some effort to make it read as simply as possible.

We have no problems with the schedule proposed by the Ministry of Natural Resources in terms of starting on Tuesday evenings in the weeks where we have public hearings. We think that's a very reasonable thing to do and it will help move from place

1 to place.

. 11

There seems to be really, from what we can read in these submissions, two contentious issues.

The first is the witness panel that was produced at the Dryden hearing under the Board's instruction; and, secondly, the role that Mr. Freidin played in terms of directing questions at that witness panel.

We are still of the opinion that we like having the witness panel there, we think that it did the job well at Dryden in terms of being able -- for people who showed up to be able to provide answers for them in terms of the local situation. We thought that was fairly valuable and we thought it gave them a better understanding and cleared up some of the confusion that they had.

We are unclear exactly about what Mr.

Lindgren means in term of his comments about

dissatisfaction with Mr. Freidin's questions. We have

reviewed the transcript to see where Mr. Freidin may

have been leading evidence or may have been

interrupting too frequently. We would like to hear Mr.

Lindgren's views on exactly what the problem was with

Mr. Freidin's questions.

And I think those are all the comments we have.

1	Ms. Murphy?
2	MS. MURPHY: Given that, I assume that
3	really what you need to do is hear from Mr. Lindgren.
4	I would just comment that I think it would be very
5	useful to have to have Ms. Devaul at the open houses to
6	assist people. People do have questions and certainly
7	are happier being able to direct those to the Board and
8	a representative of the Board.
9	With respect to the notice, the notice
10	that was put in the last newspaper was drafted by the
11	Board and if you are asking that MNR attempt to redraft
12	the notice, we would be glad to that, we welcome
13	One concern, we should be very careful of
14	the time. The next hearing being scheduled for May
15	22nd, in order to provide 30 days' notice in the
16	newspaper, if you were dealing with the daily, the
17	notice will have to be in by April 20th, which is a
18	Friday, but we also deal with weeklys, which is
19	something else we have to consider.
20	MADAM CHAIR: Pardon me?
21	MS. MURPHY: We also deal with weekly
22	newspapers that only come out once a week obviously,
23	and so the notice that will provided to them to publish
24	will have to be given to them prior to I believe the
25	14th of April.

1	MR. MARTEL: Do you know when the dailys
2	in this area are because some come out on
3	Wednesdays, some come out on Saturdays, depending on
4	where you are at.
5	MS. MURPHY: My understanding, we have a
6	list of the newspapers and the dailys of course in
7	Kenora and so forth are daily. The weeklys I believe
8	in the area come out Wednesdays, but we will have to
9	double check that, usually Wednesdays.
.0	So that means that we will have to have
.1	that to them in the week prior, and I believe I was
.2	looking at that means by the 14th of April, so that
.3	will give us a short time to attempt to do this, but we
.4	are certainly pleased to give that a try.
.5	MADAM CHAIR: Are you finished, Ms.
.6	Murphy?
.7	MR. LINDGREN: Madam Chair, I should
. 8	indicate that I have extra copies of my letter if
.9	parties need it. Just a second.
10	MS. MURPHY: Actually, I am sorry to
21	interrupt, and I don't know if this will be of
12	assistance, but there were letters written about this
13	issue last year and I don't know if you have them to
4	hand and, if you don't, I thought you might like to

have copies of them for reference, whether you look at

25

1	them later or not; and I don't know if you have it with
2	you, but I have a few copies.
3	There was a letter from me to all parties
4	dated May 31st, 1989 dealing with similar issues, and
5	also June 21st, 1989. I just thought you might like to
6	have copies of those. (handed)
7	MADAM CHAIR: Thank you, Ms. Murphy.
8	MR. LINDGREN: Madam Chair, before I
9	address the two contentious issues I can identify,
10	perhaps I should indicate at the outset that we have no
11	objection to Ms. Devaul being present, in fact we agree
12	that she should be there.
13	As well, before I deal with the two
14	contentious issues, I would like to review some of the
15	other issues that I raised in my letter.
16	The first page, in paragraph No. 1 we
17	indicate there should be a multi-party open house. We
18	agree the open houses I think were workable and I
19	thought generally well attended, but I think they were
20	quite useful. I know I spoke to a number of people, I
21	know that the other parties who were present had a
22	generally good sense or a good feeling about how the
23	open houses were conducted.
24	MADAM CHAIR: Excuse me, Mr. Lindgren.
25	We actually didn't we don't know how many other

1	parties we	re all	the	major	parties	represented	at
2	the open hous	e?					

MR. LINDGREN: The Ministry of Natural Resources, the Industry, FFT and OFAH were all present, they all had displays and so on.

And I should say at the open house the Ministry did provide a number of witnesses who were knowledgeable about the case in general, this is the point that I am raising in Item No. 1, they produced foresters, biologists, policy people and so forth and they were available to answer any questions that were raised by the public.

I think it is clear from my letter that that is the time, in our view, that those kinds of informational questions should be posed and that's when the MNR should address them.

It's our view that the Ministry really should not be permitted or required to call a panel of witnesses during the actual public submission sessions. As I indicated in my letter, that's unprecedented. I am aware -- we are aware of no other situation where that has been permitted other than in this case, but above and beyond that, I don't think it is an appropriate procedure and there has been some suggestion that it may in fact be improper or even

1	illegal because what in effect it is doing is providing
2	the Ministry of Natural Resources with quasi-rebuttal
3	or quasi-reply evidence to respond to some of the
4	submissions made by members of the public.
5	And I would also point out at some of the
6	forthcoming satellite hearings we have a number of
7	other parties who do intend to present evidence or make
8	submissions and surely no party would suggest that the
9	Ministry should be permitted the right or opportunity
10	to call witnesses to reply at that time.
.1	MR. MARTEL: Could I stop you, Mr.
12	Lindgren?
.3	MR. LINDGREN: Yes.
4	MR. MARTEL: Because I guess I was very
15	pushy on that subject quite frankly, having attended a
16	few open hearings over a period over a few years, a
17	variety of issues.
18	When matters are raised by the public at
19	these hearings, whatever they are, surely the public is
30	entitled - and this is a position I took - to get the
21	answer then in front of the Board that they are
22	appearing before so that in fact they feel comfortable
23	that the information they are getting as the public is

Farr & Associates Reporting, Inc.

And are we going to send letters to

precise and accurate.

24

25

1	everyone? We can't answer the questions, I don't
2	intend to try and I am sure my colleague doesn't. So
3	how do we give the public answers to the issues that
4	are raised before us?

Surely you are there to ensure that in fact what you are afraid is going to occur doesn't occur; that the government doesn't try -- the Ministry doesn't try to lead new information or enhance their position. Surely it is what it is and that's an information centre to some degree for the public at large who can't follow these hearings every day.

And I would feel miffed to have to tell people: Well, you will get your answer somewhere down the road because somebody is going to in fact give you an answer some day.

If I were the public I would want to hear the public in front of the Board to be really comfortable that the answer that I was receiving was precise and everybody was there, to try and keep this in balance, we are going to be sure that the answers given were in fact precise.

MR. LINDGREN: I appreciate your concerns, Mr. Martel, and I must say in all fairness I did share those concerns.

I did originally agree, or I was

1	persuaded that this in fact was a good procedure, this
2	is an opportunity for the public to ask questions of
3	the Ministry under oath. I mean, that was the theory
4	of providing this panel of witnesses.
5	MR. MARTEL: Didn't Forests for Tomorrow
6	support the position taken by the Board at that time?
7	MR. LINDGREN: Pardon me?
8	MR. MARTEL: Didn't Forests for
9	Tomorrow in fact, they did support the proposition
LO	put forward by the Board that people should be given an
11	opportunity to have answers from a panel of experts on
12	that occasion.
13	MR. LINDGREN: I don't believe we took a
14	formal position on the matter, Mr. Martel. I was the
15	person who attended the Dryden satellite hearing and I
16	was not
17	MR. MARTEL: I am talking about the
18	discussion as we had before the Board on this very
19	issue.
20	MR. LINDGREN: I was involved in that as
21	well, Mr. Martel.
22	MR. MARTEL: Ms. Swenarchuk was involved,
23	was she not?
24	MS. MURPHY: I'm referring to Volume 101
25	of the hearing. It was May 9th and Ms. Swenarchuk's

1	submissions	are in that	volume at	couple of	locations,
2	and you are	correct, Mr	. Martel.		

MR. LINDGREN: That's right. The FFT was represented, we did take part in the discussion.

And as I said earlier, I personally was persuaded that that was a good idea. I am now less persuaded of the salience of that idea. Let me illustrate why.

The panel was theoretically available to answer questions from the MNR, sounds good in theory. In reality very few questions were put directly to the panel by members of the public. I have reviewed the notes and the transcript and the proceedings very carefully, that is my assessment.

What the members of public were trying to do or attempting to do was direct their submissions clearly and directly to the Board and any exchanges that occurred between the witness panel and the members of the public occurred after Mr. Freidin had asked his questions.

I admit the questions were short, I take no issue with Mr. Freidin's conduct - I am not sure if that is what Madam Chair read into my letter - I take no issue with the actual conduct of the questioning save and except to say that, in our view, some of the

1	questions could be characterized as somewhat
2	self-serving and I think that impression was to some
3	degree shared by members of the public.

The Board may recall one gentleman - I can't remember the name - had made a submission which was followed by some questions put by Mr. Freidin to the panel and that individual -- that member of the public lamented how, in jest, that he wished he had a nice lawyer there asking him nice questions. And I took that to be a fairly serious indication that there is something manifestly unfair and wrong with that procedure.

There are a number of other concerns that we have about that. Other parties to the hearing, as I understand it, were not permitted to cross-examine or correct the witness panels or panel of witnesses with respect to statements that had been made. There were a few --

MADAM CHAIR: Excuse me, Mr. Lindgren, I would interrupt here. I think - and I will have to go back through the material again - but I think we said fairly clearly that parties could in fact question, as long as they didn't go for the jugular. We weren't interested in --

MR. LINDGREN: No, no, I am not referring

to members of the public, I am referring to the

statements that were coming from the witness panel, the

panel of MNR witnesses.

MADAM CHAIR: We hadn't said anything that parties weren't allowed to object to those questions or put other questions to the panel members.

MR. LINDGREN: Well, perhaps I was somewhat misled, but it was my understanding, perhaps self-imposed, that we would not have been permitted to ask questions of the panel.

I mean, I t hink that would have undermined the whole reason of being there, that the opportunity was to give members of the public a chance to speak to the Board, not necessarily to ask questions of MNR witnesses under oath.

Mr. Martel, I appreciate your concerns that perhaps a member of the public feels that they or she may be entitled to ask these questions and expect an answer under oath. I think Ms. Swenarchuk pointed out on the record - or if she hasn't - she has indicated to me that, in our view, the whole purpose of the satellite hearing was to give members of the public an opportunity to speak directly to the Board.

They have year-end access to the MNR and I can't for a moment think that if a question is put to

L	the MNR by a member of the public and that MNR person
2	is not under oath that the answer would not be candid
3	or that the content of the answer is somehow depend on
1	whether or not he was under oath. I don't think that's
5	a suggestion that anybody has made and I don't
5	necessarily think it is desirable, advisable or
7	necessary to have an MNR person under oath before this
3	panel in order for members of the public to put
9	questions to them and get answers.

MR. MARTEL: Well again, my memory is maybe not as good as it should be, but was that not discussed as well, I mean, the whole question of the panel and having them under oath so that in fact the information would be provided to anyone who needed an answer.

I mean, it's easy to say we will give
them an answer at the open house portion of it but, you
see, not everyone is going to come Tuesday evening or
Wednesday morning, they are going to come, they are
going to have their say, and how do we provide an
answer at that time?

MR. LINDGREN: Well, with respect, Mr.

Martel, I think you are operating under the presumption
that we will be inundated with questions from the
public, and that clearly was not the case.

MR. MARTEL: I am not saying that at all,

I mean -- but this is not Downtown Toronto either, you

know, people come 50 miles to have their little say and
they should have a right to get that answer.

And it isn't, in my opinion - I could be dead wrong, Mr. Lindgren - but it is not Toronto and you don't take a subway and jump on the subway and ride for 10 minutes with a token, you drive a long distance, and surely we should make it possible for people to feel comfortable and get the answers to the questions they raise when they are before us. I mean, that is my concern dealing with the public.

MR. LINDGREN: We share that concern, Mr. Martel, but the experience of the Dryden hearing demonstrates that they did not come there for the purpose of asking questions, they came there for the purpose of making submissions directed to the Board. This is their only opportunity that they'll have to do it and, in our view, that opportunity should not be in any way fettered or interfered with by --

MR. MARTEL: Would you agree there were questions raised that none of us knew the answer to that the staff from MNR were able to answer?

MR. LINDGREN: There were questions raised but I would point out that they were raised by

and	large	after	Mr.	Freidin	had	asked	questions	of	the
witn	ness pa	anel.							

And I would go further and suggest those were questions that could have been and should have been provided during the open house, again, assuming that the person had been able to attend it, which brings me to Dr. Quinney's suggestion that perhaps the open house could operate concurrently.

I must say, again in all candidness, that that was a matter that we had discussed amongst ourselves, we haven't decided one way or the other as to whether or not an open house should be operating concurrently with the public sessions. My gut reaction is that perhaps they should not be, but that would be one way to resolve the difficulty of people who can only attend at one time and would be desirous of some answers from the MNR. I just throw that out for consideration.

But the bottom line of our submission here, Madam Chair, is that these satellite hearings have been reserved exclusively for the public and the Dryden experience has demonstrated that the public views that opportunity, I think fairly well and fairly flexibly, to present their views to the Board and, in my assessment, they did not go there with the purpose

of putting questions to the witnesses, that if that occurred at all it occurred after Mr. Freidin had attempted to rebut or reply to the submissions that they had made, and I think that may have caused these individuals to go back and try to clarify what they meant or what the MNR meant. I think that is why that exchange occurred; it did not occur prior to or during the submission made by the members of the public.

I also point out in my letter that if the MNR or any other party is concerned about the content of public submissions, they have the opportunity to deal with it in their own case, and in the case of the MNR, they have the opportunity of reply. They are the only party with that right I would point out.

Let me conclude by just saying the satellite hearings are first and foremost a Board endeavor - I think we are all agreed on that - and, in our view, it should not be permitted to become a vehicle for parties to reply or rebut the submissions made by the public. It should not degenerate into a proceeding that is dominated or oriented towards any other party, it should be solely reserved for the opportunity of members of the public to make submissions to the Board.

If they have questions of the MNR, I

1	suggest that there are other avenues and other
2	mechanisms to deal with that, one of which would be the
3	open house where the equivalent to the MNR witness
4	panel would be made available and if, for example, the
5	answer is unsatisfactory at the open house, then surely
6	the member of the public can raise that as a concern at
7	the public submission session. It doesn't have to get
8	an answer, the fact that the answer itself is
9	unsatisfactory could form the basis of a submission, or
10	it could be indicative of a larger problem, I am just
11	speculating.
12	But again to conclude, we feel very, very
13	strongly about this issue. It's not simply a matter of
14	having some witnesses available, it's a fundamental
15	issue as to what is a fair and proper procedure
16	allowing or permitting or requiring the MNR to provide
17	a panel of witnesses to rebut or reply or perform
18	damage control after public submissions have been made
19	is, in our view, an inappropriate procedure.
20	MR. MARTEL: Do you think the Board
21	doesn't recognize that, Mr. Lindgren?
22	MR. LINDGREN: I am sure they do, but I
23	am wondering whether members of the public recognize
24	that.
25	MR. MARTEL: See, when I looked through

the material and I tried to -- I read your point five,
I guess it is, and I looked to see because like Mrs.
Koven I wasn't sure what you were saying in point five.

"Accordingly, we strongly object to the procedure used during the Dryden hearing whereby MNR counsel was permitted to pose questions to a panel of MNR witnesses."

And I looked -- I went back, and that is why we had Ms. Devaul pull the material, to try and get an understanding as to whether there was something unfair, whether they were trying to lead some sort of evidence, whether they were trying to get a second kick at the can, whether it was damage control.

I think what we wanted was straight factual answers to matters that were raised, and they were raised by a number of people, maybe not directly to the panel, but in fact there were questions left unanswered that we as a Board wanted answers to before we left town in terms of what was the evidence, because much of it is not prepared by experts and we want people to feel quite comfortable. But, on the same hand, you want to judge this stuff in a fair way, so you want to make sure that everything that is being said is factual.

I thought that some of the material was

1	cleared up quite nicely for my satisfaction anyway, and
2	it wasn't there to enhance any particular party.
3	MR. LINDGREN: Well, with respect, Mr.
4	Martel
5	MR. MARTEL: You might give me some
6	examples. Be helpful then.
7	MR. LINDGREN: Okay. I had contemplated
8	bringing some specific examples to the Board but I
9	decided not to because the issue is not: What did
.0	witness "x" say and was it wrong, incorrect or
1	misleading, but I think it's fair to say that, in our
.2	view, there were some statements that could be
.3	characterized as that and we didn't have the
. 4	opportunity, as we understood it, to obviously we
.5	couldn't reply by way of our own rebuttal panel, we
.6	couldn't cross-examine the witnesses that were made
.7	available by the MNR because to do so, in our view,
. 8	would undermine the very purpose of the public
.9	submission session which is to allow the public to make
20	their views known to the Board.
21	MADAM CHAIR: Mr. Lindgren, we have three
22	notions that partially address your concerns to improve
23	the witness panel mechanism that we used at Dryden.
Δ	The first is that the witnesses

themselves would only answer questions that were

25

directed to them by the Board; in other words, if a
member of the public stood up, the Board would say:

Mr. Smith, could you please provide an answer to this
question. We would essentially handle the traffic flow
between the public and the witness panel.

1.1

MR. LINDGREN: So do I understand then that MNR counsel would not be permitted to pose questions?

MADAM CHAIR: The second point would be that MNR counsel could only pose questions with leave of the Board. There would be no spontaneous jumping up and down and saying: Please clarify this and so forth.

And the third notion is that we would expect, if we were running into difficult waters, that the other counsel would object, and I don't mean in a theatrical long, drawn-out way, but simply stand up and say: That question isn't proper because...

I don't think that is out of line for a public hearing, for you and other counsel to do that.

MR. LINDGREN: Well, no, I think that's totally unacceptable. And yet if you are going to require leave to pose certain questions, I think that there is a good possibility that that type of theatrics will be engaged in. I think that would convey the wrong message to the public and, more importantly, it

1 would infringe	upon	their	time	to	make	the	submissions.
------------------	------	-------	------	----	------	-----	--------------

I think all of those concerns or potential concerns could be easily alleviated by not requiring or permitting an MNR panel to be there to provide answers, because if they are there to provide answers and we don't like them, then we are going to have to start cross-examining -- I mean, if they offer an answer --

MADAM CHAIR: No, I am not talking about objections to the answers that are given, I am talking about objections to the process whereby you are objecting to the fact that Mr. Freidin is leading a witness, and Mr. Freidin will undertake only to ask questions that will clarify the question that Mr. Smith who is standing up asking it has to say.

I am not talking about the questions as just evidence, I am talking about keeping the process of the public asking the MNR people these questions in a very proper way.

MR. LINDGREN: The problem is that the answer that is given may or may not be consistent with other parties' interpretation or understanding of the evidence and, for that reason, they may feel obliged to either cross-examine or call their own evidence to give their own side of the issue that has been raised.

1		MADAM CHAIR: Well,	you will be doing
2	that in your	case and Mr. Freidin	would do that in his
3	reply.		

MR. LINDGREN: So why be allowed to do it during a satellite hearing?

MADAM CHAIR: He's allowed to do it

because -- well, he may not be allowed to do it. I

mean, I don't know what kind of questions he's going to

ask, I don't know why the witness panel members can't

deal directly with the public - I have to review Mr.

Freidin's questions - but the only condition under

which we would allow him to ask a question is to

clarify either a misunderstanding between the public

and the witness or an incomplete answer or something

that wasn't giving the member of the public the

complete answer that he wanted.

MR. LINDGREN: Well, I think I have said everything I can.

MR. MARTEL: Could you help me again. I worry about the public involvement, because I can well recall Forests for Tomorrow wanting somehow to make sure that — the public is out there and the government looks after their forests for them, they are not here every day hearing the evidence and it's a very confusing proposition before the general public, this

whole hearing.

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Surely we want them to be involved

freely, to get answers freely, to try to understand

because they are not here every day, they are not there

with counsel, but it seems to me we are putting a

straight jacket on them, that the whole intent of

direct involvement by the public is going out the

window.

They can get up and have their say, but there is no dialogue, there is no dialogue allowed and that is, in a sense, what has happened, if I. understand, because I can't question them, I can't give the answers - I could ask them some questions - but we in fact in this townhall sort of meeting that we were going to have across the province are putting them in a straight jacket because it's a one-way dialogue, them telling us their concerns and then unless they followed this every day for the past two years - I am not sure very many stay up nights to read it - they have no opportunity for dialogueing with MNR. Because in fact the MNR is the proponent, hopefully if somebody steps out of line the lawyers would say from the other parties: Wait a minute, this goes beyond bare information.

I mean, the only reason we wanted the

panel there was so that the factual information could be given. And while I see it at this time - I am going to review the stuff tonight - quite frankly I see it as really straight jacketing the whole process. It is not a very informal process, in fact it is a very limiting process that we are about to engage in if we follow -- we can't have a panel of local people from MNR, people who are conversant province wide. I mean, it seems to me that we are putting it in a straight jacket.

MADAM CHAIR: What Mr. Martel is saying I think is that we might as well save us the time and expense of going around the province and just have people write into us and tell us what they think, because essentially there is very little that we as the Board can tell them. The issue is about their forest and they want some information about that.

MR. LINDGREN: Well, I am taking up too much time here, but --

MR. MARTEL: I think we need the discussion, Mr. Lindgren, if you don't mind, because I am not trying to rush into this, but I am trying to comprehend and understand your concern. I am trying to understand from the public's perspective of what they can get out of this; I mean, otherwise it's useless — is there any sense coming if it's just a one-way

1 dialogue?

8

13

14

15

16

17

18

19

20

21

22

23

24

25

2 MR. LINDGREN: Well, Mr. Martel, with 3 respect, the concern is legitimate but in reality -4 again, I stand to be corrected on this, but I did 5 reviewed the transcripts and my notes very carefully -6 but the reality is very few people went there with the 7 express purpose of asking MNR the questions, they went there to deliver oral and written submissions to the 9 Board and that is exactly what happens before other 10 tribunals - such as the OEB as referred to in my letter - and the Environmental Assessment Board in 11 12 other hearings.

> It's totally unprecedented in our experience to allow any party, be they the proponent or any other intervenor, it's unprecedented to allow any party to call evidence during the public submission sessions and that is essentially what --

MADAM CHAIR: The fact that it's unprecedented doesn't bother us, but the fact that there is some legal implication about how this is done obviously does concern the Board greatly.

In my memory I can recall two questions that were put to the MNR panel and I think they both started with a sort of preface of: I want to ask you this, and one had to do about trees that were cut along

1	the roadside and another had to do with suffocating
2	bears in caves or something.
3	MR. LINDGREN: Yes, that was Mr.
4	Broadhagen, I remember that submission. But I
5	believe - I stand to be corrected - but I believe that
6	question came after the bulk of his submissions, in
7	fact it might even have come after Mr. Freidin's
8	questions to the panel.
9	I am generalizing. I can recall there
.0	was another question that was put directly to the pane
.1	and that concerned tree nursery or tree nursery
.2	funding.
.3	MADAM CHAIR: Employment.
. 4	MR. LINDGREN: That went directly to the
.5	MNR, that's correct. But again, overall I think the
.6	majority of people who attended, attended to make
.7	public submissions and I think that is borne by the
.8	record.
.9	MADAM CHAIR: Well, you can see Mr.
10	Martel and I are going to have to be convinced
21	otherwise or we will be doing much the same thing
12	again. Is there something illegal about what we are
23	doing, or do I have to call Mr. Turkstra?
24	MR. LINDGREN: Well, that may well be
25	necessary. It's our suggestion that what the Dryden

1	procedure amounts to is giving a party; namely, the
2	proponent, quasi-reply - I can't think of another way
3	to put it - and I think that's unfair for one thing,
4	but it's not the proper place to be dealing with
5	concerns that
6	MADAM CHAIR: If Mr. Freidin were not
7	allowed to open his mouth during the session, would you
8	still consider that to be the case, that the MNR
9	witness panel were giving
10	MR. LINDGREN: Then that raises a
.1	question of what the other parties can do with respect
12	to the evidence that is coming out, because we may
.3	disagree with it very vehemently. Are we permitted to
4	cross-examine on it or call our own panel of evidence?

MR. MARTEL: If you will recall, we didn't force people to be sworn in because we said people were coming in off the street. I mean, I can remember MNR being quite uptight about this, I think they wanted — they were really concerned about somebody saying something and being cross-examined, and we said: No, we wanted it very informal, to keep it open so that the public who weren't used to coming to such a forum in fact felt free to ask questions or state their position, because most of them came in off

I think not, and that's not the purpose of the hearing.

1	the street, save a few with unprepared, or if they did	
2	have prepared stuff it wasn't prepared with the help of	
3	counsel or that.	

We really wonder -- that is why we didn't swear them in, to be quite free to say what they wanted to say and, as I say, I have looked at some - not nearly as carefully as I will tonight - but to where MNR was trying to present a different position or enhance their position.

MR. LINDGREN: No, that is not the suggestion at all.

MR. MARTEL: To take a second kick at the can, I think is what you are saying. They are not going to convince the Board; are they, they are talking to the public out there.

MR. LINDGREN: That's right, and that is one of our concerns, because we were concerned that some of the statements coming from the panel of witnesses were, if not misrepresenting some of the evidence, then certainly could mislead certain individuals as to what the state of the evidence is or what the position of the parties were with respect to that evidence.

MS. MURPHY: Well, Mr. Lindgren is going to have to give me an example because he's now getting

1,	into
2	MR. LINDGREN: If it's necessary to do
3	so, I will provide it.
4	MADAM CHAIR: Are you saying out of the
5	evidence that the MNR witness panel gave at the Dryden
6	hearings you will be formally addressing that specific
7	evidence in your case, that it was to such an extent
8	that you feel you have to address it directly in your
9	own case?
10	MR. LINDGREN: I think it's safe to say
11	we would have addressed it anyway, but the concern is
12	what the impression of the public is after that and our
13	concern is that these people may have been mistakingly
14	left with an understanding of the evidence that is not
15	correct, and there is no point in pursuing that until
16	get the transcript.
17	MADAM CHAIR: And how do we know, how do
18	we know what the credibility of the MNR witnesses were
19	to that audience. Those are all questions we don't
20	have any answers to.
21	MR. LINDGREN: That is precisely the
22	issue that I am hoping to avoid by not having the MNR
23	witnesses there, because if for some reason or slip of
24	the tongue or whatever the MNR witness provides an
25	answer that is clearly incorrect or false or

misleading - and I am not suggesting that it has

occurred - but if it did, you would have a number of

counsel leaping to their feet no doubt and that no

doubt would very seriously undermine the credibility of

that process in the mind of the public who attended or

heard about it.

But more importantly - Mr. Martel used the adjective straight jacket a few moments ago - my submission to you is that if this procedure is allowed to continue; that is, if the MNR is permitted to call witnesses who can respond to or reply to submissions and there is a potential that those answers will go beyond mere information and in fact could be called evidence, then I suggest that is a straight jacket, that is effectively undermining the use or the ability of this public submission session to allow members of the public to make their views known to the Board.

MR. MARTEL: Surely that is why other counsel are present, to make sure that doesn't occur, Mr. Lindgren.

MR. LINDGREN: Well, I can tell you, Mr. Martel, with all due candor that I did have to restrain myself quite a bit. I did not object to any questions though I felt they were clearly objectionable because that was not the forum to do it, the forum to do it is

1	now when we are discussing these procedural issues. I
2	think that if this procedure is allowed to continue
3	MADAM CHAIR: You weren't objecting to
4	the answers?
5	MR. LINDGREN: I would have.
6	MADAM CHAIR: You said the questions.
7	MR. LINDGREN: Well, the questions and
8	the answers, I am objecting to the whole process.
9	MADAM CHAIR: The questions from Mr.
10	Freidin?
11	MR. LINDGREN: The questions and the
12	answers. And as I indicated, the time to do that in my
13	view is not at the time that the questions and answers
14	were being posed because, again, I didn't want it to
15	degenerate into a whole procedural argument as we have
16	seen often in this hearing, that I think would not go
17	very well with the public who had attended the session.
18	The time to discuss and determine whether or not that
19	procedure should be continued is now.
20	Our position is very clear, and I will
21	just repeat it one more time for the sake of the record
22	and I will be gone and; that is: In our view, the MNR
23	should not be required or permitted to call witnesses
24	or any evidence during the public submission sessions.
25	If there is a need for informational witnesses - and I

1

1	am not convinced that there is a need because very few
2	questions were put to MNR witnesses - but if there is a
3	need for MNR informational witnesses, we suggest that
4	the proper and most appropriate time and place for
5	those witnesses is to attend or to be participating in
6	the open house sessions.
7	And I have nothing further to add.
8	MADAM CHAIR: Thank you, Mr. Lindgren.
9	MR. CASSIDY: Madam Chair, I would like
10	to address this matter just briefly. I'm content to be
11	heard at your convenience.
12	MS. MURPHY: Perhaps I should wait until
13	the end.
14	MR. CASSIDY: My submissions, Madam
15	Chair, will be brief.
16	In respect of Mr. Lindgren's position I
17	have reviewed his letter and the concern I share is the
18	one that you indicated, that the question is: Are we
19	doing something illegal. And I have not seen in Mr.
20	Lindgren's letter a detailed discussion of that. There
21	is reference to it on page 2 in the last full
22	paragraph, but I am not satisfied and it's not
23	satisfactory, in my submission, that that paragraph
24	provides an answer to your question.
25	If Mr. Lindgren is alleging that the

1	procedure the Board has adopted to date; i.e., the
2	Dryden hearing, is somehow illegal; that is, it offends
3	some legal principle, I should think that it might be
4	wise for the Board to hear more detail from Mr.
5	Lindgren on that, and obviously that may not be
6	possible to do tonight.
7	But, in any event, I don't think this
8	paragraph is satisfactory. It refers to the practice
9	of another tribunal which is in and of itself no
10	indicator of what this tribunal should do and,

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

counsel.

So my submission in summary is that the answer to your question is not satisfactorily answered by this letter and Mr. Lindgren should deal with it by way of further explanation of the legal position for you to get that answer.

therefore, if he is going to state that position, it

should be made clear so that other parties have the

opportunity to respond to that and the Board, if it

deems it necessary - which I would think it would be -

those submissions, would then want to consult with its

the Board some day would have to decide upon hearing

MR. LINDGREN: If I could respond to that right now, Madam Chair. I am certainly prepared to do that, I am prepared to expedite the process by filing a

1	further written submission detailing the legality or
2	illegality of this procedure and I am prepared to do
3	that forthwith.
4	MADAM CHAIR: That would be very helpful,
5	Mr. Lindgren. Could you do it by Friday?
6	MR. LINDGREN: That sounds very possible.
7	I will attempt to do so.
8	MADAM CHAIR: And then we could discuss
9	it again next Tuesday. We could discuss it a week
LO	this coming Tuesday, the 12th. The deadline is coming,
1	the 14th and the 20th, that is the week after next.
12	MS. MURPHY: That's right. You may
13	recall in the notice that was published for the last
14	hearing, the hearing in Dryden, the comment was made in
15	the notice so that the public would be aware that there
16	would be a panel of witnesses available.
.7	MADAM CHAIR: So we will have to settle
18	this before the notice goes out.
.9	MS. MURPHY: Yes. It will have to be
20	resolved but, of course, we can go ahead and draft a
21	notice and that can go in or out, depending on your
22	final decision, but we will have to keep in mind that
23	that will have to be dealt with before the notice goes
24	out. It's one of those things that you have to or you

should definitely advise people about in the notice,

25

1	what they can expect will happen at the hearing.
2	MADAM CHAIR: Well then, we will ask Mr.
3	Lindgren if he can have that submission to the Board in
4	writing by Friday.
5	MR. LINDGREN: That is correct, Madam
6	Chair. And I would also indicate that there was some
7	question as to the portion of the transcripts that I
8	was referring to, wherein there was some questionable
9	statements perhaps made, and I will include that in the
10	submission as well.
11	MADAM CHAIR: And you will be addressing
12	the legality of the entire process of using this
13	witness panel?
14	MR. LINDGREN: Yes, Madam Chair.
15	MADAM CHAIR: And the other parties will
16	put their minds to this and we will discuss it next
17	Tuesday night?
18	MR. CASSIDY: Yes. And I assume Mr.
19	Lindgren would be required to provide the other parties
20	with a copy of that submission so that we can
21	intelligently address it on Tuesday night?
22	The Board is nodding affirmatively. For
23	the purposes of the record, can I just
24	MADAM CHAIR: Yes, Mr. Lindgren will do
25	that.

1 Ms. Murphy?

MS. MURPHY: Well, given that recent discussion in fact I was about to make the same comment. I don't know that it would assist at this point for me to respond to Mr. Lindgren. Mr. Martel has quite clearly set out the reasons for the Board wishing to have the panel there in the first place and precisely the same reasons were reiterated today as were dealt with earlier.

I would point out that Mr. Lindgren makes reference to reply and the fact that some of these things could be dealt with in reply. With respect, of course that does not respond to the concern that you were discussing, Mr. Martel, that people perhaps want an answer now; reply won't be for some time, and as a practical matter I point out that to deal with these matters in reply at some future date would require us to call witnesses from perhaps 14 places to do that. It doesn't seem a logical solution to the problem.

In any event, the real concern is the potential that has been raised by Mr. Lindgren, that there is some legal principle that is at issue here. I am not certain what it might be and, again, it's really that matter that we should be addressing.

I think we are going to have to wait and

1	see from Mr. Lindgren what principle he suggests is at
2	stake.
3	MADAM CHAIR: Are there any other
4	comments to be made about the satellite hearings?
5	Yes, Ms. Harvie?
6	MS. HARVIE: If this is going to be
7	discussed further on Tuesday night, perhaps it would be
8	more appropriate for MOE to make its submissions,
9	except I think it could be said safely now that we
10	would support any steps that would make the process
11	more accessible and more comprehensible to the public
12	and would encourage public participation.
13	MADAM CHAIR: And I take it there are no
14	other disagreements about other aspects of the
15	satellite hearings, the way they were constructed for
16	the Dryden hearing?
17	MS. HARVIE: Just that one point. If the
18	Board decides that a witness panel, there is no problem
19	with the legality of it and it's an appropriate place
20	for a witness panel to be, it might be worthwhile
21	considering when major intervenors present their case
22	to the Board at the satellite hearing whether or not
23	it's appropriate for the witness panel to be present
24	while evidence is
25	MADAM CHAIR: We consider that to be a

1	totally different situation. We are talking about
2	individual members of the public who have fairly you
3	know, they don't have a lot of research behind them in
4	terms of coming with the questions they want to ask.
5	These are very much people who want to be informed and
6	may not have a good grasp of the situation at all.
7	MS. HARVIE: All right.
8	MR. MARTEL: Ms. Murphy, did you say
9	Volume 109 was the original discussion?
10	MS. MURPHY: Volume 101.
11	MR. MARTEL: Volume 101?
12	MS. MURPHY: Yes, Volume 101, May 9th was
13	the first discussion of this issue, Mr. Martel, and you
14	will find that discussion commences around page 16989.
15	There is discussion as well in Volume
16	108, June 5th, 1989 though I don't think it's very
17	lengthy. And then finally I can find those page
18	numbers, if you like.
19	Finally, in Volume 117, June 21st, 1989
20	there was the final discussion after circulation of the
21	letter that I have produced to you today dated June
22	21st. So those are the places you will find the
23	discussion that took place on these matters previously.
24	MR. CASSIDY: Madam Chair, I would like
25	to raise one other matter that has to be dealt with on

1	Tuesday, and that is the matter - we have discussed it
2	before but I think we have got to have some direction
3	and deal with this matter fairly soon - and that is the
4	timing for Forests for Tomorrow's evidence and
5	production of it.
6	And rather than surprise Mr. Lindgren, by
7	raising it now I think it would be appropriate, given
8	that that is a week away, for the parties to address
9	that matter at that time. You may not be able to
.0	decide, but I think we are getting to the point, given
.1	the pace at which I anticipate our evidence is going to
12	go in, that I think we have to decide that sooner
13	rather than later.
14	So if we could please speak to that and
15	Mr. Lindgren or Ms. Swenarchuk, whoever it is on
16	Tuesday could come prepared to discuss that matter.
L7	MR. LINDGREN: We have in fact given that
L8	subject considerable thought and Tuesday would be an
19	appropriate time to discuss the proposal that we have
20	in mind.
21	MADAM CHAIR: Thank you, Mr. Lindgren.
22	MR. CASSIDY: Thank you, Madam Chair.
23	Thank you, Mr. Lindgren.
24	MADAM CHAIR: I will leave it then, in
25	terms of drafting the notice, Ms. Devaul will consult

1	with Ms. Tieman in terms of what can be drafted at this
2	point, and we will have to make some decisions next
3	week in order to meet our deadlines.
4	All right. Thank you very much.
5	Oh yes, Mr. Martel and I have decided we
6	are no longer going to be tyrannized by plane
7	schedules. We are going to start at 8:30 tomorrow
8	morning and if we don't finish tomorrow morning, then
9	we will be here Thursday.
LO	As well, we are not going to stampede a
11	hearing day so we can catch this flight and that
12	flight. We are going to just grind along in our
L3	regular schedule.
14	Okay.
L5 L6	Whereupon the hearing adjourned at 6:25 p.m., to be reconvened on Wednesday, April 4th, 1990, commencing at 8:30 a.m.
17	[copyright, 1985]
	[copyright, 1965]
18	
19	
20	
21	
22	
23	
24	
25	







